

CERTAINE  
V. Works of Chi-  
rurgie, & newlie

COMPILED AND PUBLISHED  
BY THOMAS  
GALL, Surgeon

in Chirurgie

LONDON

Printed by Thomas East, dwelling be-  
tweene Paules Wharfe and Baimards  
Castle. 1586.



# CERTAIN The Contents.

- 1 An Institution of Chirurgie. lib. i.
- 2 An Enchiridion containing the cure of wounds, fractures, & dislocations. li. iiii.
- 3 An excellent treatise of the wound made with Gunshot, in which is confuted the grosse opinion of John Vigo, Brunswicke, Alfonso Ferrus, and others. lib. i.
- 4 An Antidotarie containing the principall and secret medicines used in the arte of Chirurgie. lib. i.

Note that in the end of the Antidotarie are placed all the Tables belonging to the Institution of a Chirurgion.

Printed by Thomas East, dwelling between Pauls Wharfe and Paternoster Church. 1586.







W. GANNINGHAM DOCTOR IN PH

And vnto his appoynted friend Thomas Gale, Maister in  
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vnto his appoynted friend Thomas Gale, Maister in

**VV**hy cease you M. Gale? What keepeth back the pub-  
lishing of your foure bookes, which with so great  
travails & perfect skil you haue so happily finished?  
Doth feare of Scotophants and detraeing tongues affoulde you?  
Or the mistrust of severe iudgement at the learned, keep back  
your honest attēpt? Let these be no impediments I shal desire  
you, but banish feare, & put frō you mistrust. And as touching  
the maloulet detractors, if either needeth not, or helpeth not  
to stand of the in dread. Apes will euer haue apish properties,  
with mocking, mowing, & ginning at euery person do what  
you can, I my selfe haue somwhat tasted of their curtesie, and  
therefore can better vtter their nature vnto you. They be such  
as for the more part are ignorant theselues, or if they beare the  
face of learning, yet be they arrogant & loiter in idlenesse, and  
therefore to maintaine their name, do carp & reprehend other  
mens good labors, thinking therby among the rude faultitude  
to get the more fame & honor. These haue not so much hin-  
dred me with their serpentine tongues, as made mee among  
the wise and learned of greater estimation. For although it be  
a comon saying, yet is it most true [Virescit vulnere virtus.]  
But wil you eschew their sting & poison? Be idle theslothers,  
regard neither your dutie to God, nor yet to your Countie.  
This must of force be your shift, which how honest it is, bee  
you the iudge your selfe. But you will saie peraduenture, you  
are armed against this forte sufficientlie, not regarding their  
force, and yet you dreade the confure and iudgement of the  
grauē & learned. Surelie these you need least of all other to  
feare: For like as Apes can do no thing but apishlie, so will  
the learned do nothing but learnedly, discretlie, & with great  
aduisement. They consider by their owne trauailes, that it is  
no trifling, but great paines to write in anie arte or sciēce. And  
when they reade other mens labours, and finde perhaps some  
errors, they reiect not the worke, they deface not the author,  
but thinke with themselves, *Hominis est errare*, And if the

errors be such, as are thought not tollerable, they will not cur-  
rishie chiocke, but crite on the admonish, or else with their pen  
speedely amend it. Seeing therefore that chattering laies may  
not preuaile against you, and that I haue (as I suppose) deliue-  
red you of the mistrust you had in the learned, defer no lon-  
ger time, nor make no more delaies, but since your Coun-  
trie crancit, your approued friends earnestly looke for it, and  
your dutie to both these require it, keepe these bookes no lon-  
ger in darknesse, but let them tast of light. And as touching  
your request in your letters sent to me, to peruse & read your  
copies, to alter, change, and adde, as I shuld thinke good, I haue  
somewhat satisfied your expectatiō herein. And first I see your  
great diligence in reading your author in Chirurgerie, as Bar-  
nus, Theodoricus, Rolandus, Lanfrancus, Rogerus, Bartolpala,  
Guido de Cauliaco, Wilbekmus, Ier. Brūswick, Vigo, & other.  
And do also consider what great paine & difficultie it was,  
to collect so perfect workes out of so imperfect authours, I  
speake it not to their dispraise, they were in the time of igno-  
rance. But in my simple iudgement, if the following of Galē,  
Auicen, Mesue, & others, of whom in your bookes you make  
so often mention, had not staied you, & your long experience  
conducted, you shuld of force haue fallen into the huge pit of  
cloudie and most grosse errors. Among which, these following  
are not the greatest, but yet not sufferable in anie case. For  
what man is so mad, knowing the nerues to be the cause of fee-  
ling, will in wounds of the nerues bid flitch the same? Who is  
so bold in great wounds in which there is fixed splents, shot,  
arrow heads, and such like, to giue the patient sleepe drinks as  
they call the? Who is so rude in wounds with Gunshot made  
through a member, as to drawe an heating rope through the  
wound? Or what ignorance appeareth in the all, in confoun-  
ding the names of diseases, and miscalling of simples? Dooth  
not Guido the best of these authors rehearsed, call Oedema,  
Vndirina? Erisipelas, Hirisipela? Scirrhus, Slirus? & that which  
I most meruaile at, that he calleth Estiomenon (which is her-  
pes exedens) mortem et disipationem membri, and he inter-  
preteth Estiomenon, quasi hominis holtem. How farr from  
the matter it is, and how ridiculous an interpretation, let the  
lear-

learned iudge. I loath to write them, and repent the lost time  
in reading them. But these for a tast I offer, whereby gentle  
reader, thou maist the better iudge and esteeme the labours of  
the author our countrie man, who for his Countreies sake hath  
spared no time to trauaile, nor regarded his great expence. Yea,  
and that which is more, not his feeblede olde corpe which is ve-  
rie vnapt to take so great a thing in hand. Thus for my part I  
dare boldly affirme, that neuer in English was so perfect worke  
in Chirurgerie set out, and I doubt whether in any other tongue  
there be in all points anie worke extant in Chirurgerie, which  
with these may be compared. For if we shal looke first of his  
Institution in Chirurgerie, how pithily, plainly, & compendi-  
ously, doth he set out the whole bodie of the art, shewing the  
definitions, diuisions, & also apt names of tumours against na-  
ture, wounds, vlcers, fractures, dislocations, & other like. How  
diligentlie instructeth he the student in Chirurgerie, first in the  
theorike and then in the practise part. Then the student be-  
ing thus trained vp, & now made apt to practise, he sendeth  
him to his Enchiridion, in which is set out the method of cu-  
ring wounds both in the similer and instrumentall parts, and  
also such apt medicines as are for them conuenient. He doth  
moreouer shew the cure of such accidents as do often chance  
to wounds. Last, he doth open the curing of fractures and dis-  
locations. Furthermore, hee hath finished a treatise, of curing  
wounds made with gunshot, in which learnedlie he doth con-  
fute the long receiued error that hath bene maintained for  
truth, how that such wounds should be venimous. How plea-  
sant this argument is, & also profitable, I refer it to thy iudge-  
ment (gentle reader) mistrusting nothing, but when you shall  
weigh his arguments, with theirs of the contrarie part, you will  
be wholie of mine opinion. And yet this good Gale staith  
not heere, nor is fatigate and wearied with these great pains,  
but hath also finished a golden worke which hee calleth his  
Antidotarie, in which is comprehended the treasures of Chi-  
rurgens. There shall the Chirurgion hauing neede  
of medicines which doo repell, attract, resolu, mollifie,  
suppurate, mundifie, incarnate, conglutinate, cicatrise,  
(and what is else requisite to bee vied in the Arte, )



finde abundance, as well of those which are called simple, as  
also of them, which because they stand in the mixture of di-  
uerse simples, are named compund. These shall he also with  
small paine and great gaine receiue in one houre, that which in  
xij. yeres trauaile, with no small expence, this Gale hath inuen-  
ted and found out. These bookes are now perfectly finished.  
He hath moreover in his haddi diuerse other works (as I heare)  
vnfinished, as a booke entituled, a Compendious Method of  
healing tumors against nature, another of the true and perfect  
cure of all kinde of vlcers, Also a new translation of Guido  
de Cauliaco, with certaine briefe eōmentaries vpon the same.  
Besides these ther be other whose titles I do not know. Ther-  
fore that these may also come to thy vs, I shall require thee  
to shew a gratefull heart, & thankfully receiue that which he  
hath with paine finished, & is freely without reward offered.  
But being delighted with the arguments of these bookes, I am  
digressed frō answering the other part of your letter M. Gale.  
You required me that since I was so earnest with you for the  
publishing of your bookes, that I would write somewhat in  
the praise and commendation of Chirurgerie. Which thing  
in mine opinion were superfluous, when that there can be no  
greater praise than is written in your workes, considering that  
through the benefit of this arte the wounded is made whole,  
the broken bones vnited, the ioynts being out of their natu-  
rall seate, reduced into their proper places, the hough & pain-  
full tumors expelled, and the virulent & malignant vlcers (which  
doth eate and deuour the mēbers of man no lesse than moths  
doth clothes, and fire that is put to it) are vanquished & ouer-  
come. Be not these great benefits, & such as needeth not the  
commendation of other? But yet if these will not satisfie you,  
at the next setting out of other of your labours, if this my  
weak bodie may recouer strength, I wil to my power satisfie  
your expectation. In the meane time I bid you wel to fare, &  
remēber your white haire are menssengers to admonish you  
that you must leaue this world, and repaire to the heauenlie  
Chirurgion Christ. And therefore hast you for the time that  
remaineth, & finish those works which you haue in your haddi.  
Againe farewell, & loue you Cuningham as you haue begun.)

# THO. GALE CHIRVRGION, VNTO

the friendlie Readers, Salutations in Christ, &c.

**I**T was not without great skill & knowledge, y<sup>e</sup> the wise  
learned Grecians did call man by the name of Microcos-  
mos, which is as much to saie with vs, as the lesser world,  
for the greater world (in Greake Cosmos) both consist of the  
heauens and elementarie region, and the lesser world (be-  
ing man) both vnder Gods rule and governe whatsoeuer is  
in them contained, and applieth them to his vse and profit.  
And if we shal begin first with that most meruailous hand  
worke of Gods, I meane the beautifull heauens, so wonder-  
full adorned & decked with most comfortable lights, what  
else shal we iudge but that he ruleth them, when being pla-  
ced so farre from the distant, both diligentlie & trulie note  
& obserue, not onelie their motions, ascensions, descensions,  
progressions, retrogradations, stations, deuiations, declinati-  
ons, conjunctions, and sundrie configurations, but also mar-  
keth what mutations, alterations & effects they cause in the  
elementarie region, whereby he is taught to take y<sup>e</sup> which  
may be to his profit and gaine, & eschue, or else mitigate, &  
equallie beare, what is thereto contrarie, & hereof it came  
to passe, y<sup>e</sup> the greate Astologian, Claudius Ptolomæus durst  
boldly affirme, that The wise by prudence and good skill,  
Shall rule the stars to sertie his will.

Yea, & the wise Philosophers and Poets, which did vnder-  
stand with no small iudgement behold the figure & shape of  
man, how he onely among all liuing creatures looked up-  
ward to the heauens, they did constantly affirme, y<sup>e</sup> only for  
y<sup>e</sup> cause he had giuen to him such countenance, & that right  
eloquentlie the Poet setteth out in these few verses.

*Pronaque cum spectant animalia cætera quæque,  
Os homini sublimè dedit, ex hunc, videre  
Iussit, & erectos ad Sydera tollere vultus.*

Where all things that doo breath,  
doe on the earth their lookes cast,  
God

O T H God, which man he did make, E I A D O H T

gave him so great a grace:

On Sunne, Moone, and eke Starres,

that he his eyes might fast:

Also to view the skie, and that with upright face.

And here by the waie I gather, that this countenance  
was not given man onely to gaze, gaze, stare, and toote on  
the Heavens, but my selfe to consider the wonderfull forme  
and frame hereof, being incessantlie it turneth and moveth  
about the center of the earth, and that the heavens are as  
fresh & lustie at this present to fulfil their course, as at their  
first creation, and that he by considering them might conceive  
that there is a God, who ruleth them, and hath made them  
to his use and profit: but let that passe, and come we unto  
the Elementarie region. What thing is therein contained  
which he governeth not, & taketh of them profit. He winds  
he gathereth in a small compasse, & by the force of them, he  
rowmeth and walketh on the rough Seas, as on the land.  
The fishes in the greatell deepes, he bringeth to his handes:  
the foules of the ayre for all their swiftnesse of winges, he  
getteth for his pray. He subdueth one soule, and teacheth  
it to bring diuers others unto him. Example of the Hauke,  
& the partridge, such is the diuine wisdom, & great power  
given to this little world, man. What: doth he not subdue  
the most strong and scarce beastes, & ouer runne those that  
are most swift: The Horse being a couragious and proude  
beast, for all his strength, swiftnesse, and force in his houle,  
doth he not hyde and tame, & rydeth on him lyke an Em-  
perour, & gouernour: The mightie Lion for all his strength,  
is made captiue & subiect: the Hart, and Hare, for all their  
swiftnesse, he ouertaketh, and to conclude, what beast is it  
whome man hath not, or cannot bring in subiection: What  
say you to the venemous serpents, scorpions, toades, & such  
as are poyss to humane nature, which man doth not onely  
banquish: but of them maketh healthful medicines, to expel  
greuous infirmities. I omit for breuitie, the innumerable  
trees, plants, fruits, herbes, rootes, gums, stones, mettalls, &  
earthes, whose secret natures he hath found out, whose ver-  
tues,



times he hath tryed, & whose substance he doth rightly vse for  
 his commonitie and welth. What artes hath he inuented,  
 what sciences found, & miseries set out: so that of right as I  
 suppose, I may call man Microcosmos, & the lesser world.  
 But me thinke I here one demaunds, to what ende is this  
 long tale of man, set out: for sooth, that you may rightly &  
 wisely consider, what a noble & excellent substance man is of,  
 who is the subiect & matter on which the Physicion & Chi-  
 rurgion doe worke. But as touching the Physicion, I haue  
 nothing to say, & therefore of the Chirurgie I purpose som-  
 what to better, both to warn this microcosmos man, of those  
 who vnder the name of Chirurgions, be nothing else but  
 open murderers, and also to deface these rude Emperikes, &  
 to prick for ward the right Chirurgion, & that you may the  
 easelier conceiue that which I go about, it becometh you to  
 know, y<sup>e</sup> chirurgery is most hard & difficult, to attaine vnto,  
 & is also a long art, & requirerh long time in learning, & also  
 exercising, as both y<sup>e</sup> princes of phisicke Hippocrates, & Galē  
 doe testifie, & all wise men doe also confesse: for how can it  
 be but difficult & long, when y<sup>e</sup> chirurgie must consider so ma-  
 ny diuers temperatures of men, & hyd and secret effects, and  
 properties of nature in them grafted. Wherefore both one  
 loue porke, an other hateth it as payson. Some abhor cheese,  
 some frute, & other some wyne: Wherefore both one concoct &  
 digest meat most hard to concoct. An other is not able with-  
 out long time to digest the easiell & lightest meates: where-  
 fore is one by drinke of wine made loose bodied, & soluble,  
 wher an other man cannot haue y<sup>e</sup> benefite, no not w<sup>th</sup> strong  
 & behemēt lardines: Furthermore, chirurgerie chiefly consisteth  
 in y<sup>e</sup> right vse of profitable experimēts, which require  
 both lōg time in findig the out, & also in obtayning their right  
 vse: & least you may obiect y<sup>e</sup> one may receiue experimēts of  
 other y<sup>e</sup> are learned, & so easely obtayne the art: I must say y<sup>e</sup>  
 the right vse can not so easely be obtained, for to y<sup>e</sup> is requi-  
 red that both the chirurgie himself be learned & wise: & fur-  
 ther, y<sup>e</sup> he teach other chirurgions of long experifce worke, &  
 put those experimēted medicines in other right vse: this maketh  
 y<sup>e</sup> art lōger, for y<sup>e</sup> ther spring new infirmities, vnderstand

to their best advantage. What saie you to Chancie  
 also, vulgarlie named Morbus Gallicus? Whiche ever haue  
 written of the nature, cause, and accidents of it, which is y  
 occasion that so many miserable haue died, and pallie pe  
 rilly of it: and those that haue recovered health haue bene so  
 small a number. Againe, the arte is longer to be English  
 men than to other, when as we are first constrained to learn  
 the Latine tongue, before we can attaine the mindes of  
 those who write of Chirurgerie. There be diuerse other  
 things which also maketh the art long, which for that I wil  
 not be tedious, I comit it to thy discretion to consider. Now  
 this I conclude, if the subiect of Chirurgerie be so noble and  
 excellent a creature, the arte must also be noble and excels  
 lent, which teacheth to worke on it. If the art be excellent,  
 then it followeth, that it is difficult and harde. Againe, if it  
 be long, then it requireth a long time in the obtaining ther  
 of, if then that the subiect of Chirurgerie be so noble, the  
 art so excellent and difficult, and so long a time required in  
 the getting thereof, thou maist easilie iudge that the rabble  
 of these rude Emperikes (and Dross of the earth, which when  
 they cannot otherwise liue, chop straight waies into the art  
 of Chirurgerie) be no Chirurgions, but manquillers, mur  
 derers, and robbers of the people: such are some Host  
 ers, Tailours, Fletchers, Pinners, Souters, Horseleaches,  
 Juglers, Witches, Sojcerers, Walwdes, and a rabble of that  
 sort, which would by lawes be giuen from so diuine an art,  
 the exercise of which, for want of knowledge, bringeth som  
 time losse of member, sometime of life, and sometime  
 both of limme and life. Wherefore I doe admonish the  
 friendlie Reader, whatsoeuer thou art, that hast need of Chir  
 urgerie, not to trust euerie runagate, and him that calleth  
 himselfe a Chirurgion, but consider whether he be learned  
 or not, demaund of him some questions of his arte (which if  
 thou canst not doe of thy selfe, thou shalt finde diuerse in  
 my booke, entituled: The Institution of a Chirurgion) which  
 if he answereth them, thou maist be the bolter to commit  
 thy selfe to him, otherwise trust him not, though he saith he  
 haue cured an hundred of that infirmities, for Experiment

and many experiences are receivable: Now being by  
these few lines, you may conceiue what a vniuersall & ex-  
cellent arte, Chirurgery is, and how thou must discern &  
know the right Chirurgeon from the murthering and bul-  
ferous Emperike, I think it good in few wordes, to let out  
vnto thee, what caused me to publish these few & simple li-  
bours of mine. There were two things which moued & stir-  
red me hereto (loving Reader) the first was the discharge  
of my talent toward God, and dutie to my native country:  
the second was to helpe my brethren & Chirurgeons, who  
although they are desirous to attaine their arte, yet bothe  
because it is so long, and not let out in our vsuall language,  
they are frustrate of their desire, & the common welth un-  
furnished of men of this professio. Wherefore musing long  
with my selfe, what part of the art I might best let out, as  
most necessarie for the, and most speedely to attaine & arte:  
I founde none more convenient then first to write an in-  
troduction of a Chirurgis, in which he might learne the the-  
orike part and principles of the arte: which when as I had  
finished and brought to an ende: I did not think good there  
to stay, but thought also it a necessary thing to compile iiii.  
treatises, comprehending the practise of some parts of the  
arte. Wherefore I dyd let pen to paper, and wrote an En-  
chiridion of Chirurgerie, containing the methode and way  
to cure woundes, both in limbes & instrumentall parts, and  
eke fractures and luxations, with a new way of stanching  
flur of blood, with out cutting of any vessels, by a poulder de-  
uised by maister Perpoint and me, which as any member is  
taken off from the booke, & is used in the Hospitals of Lon-  
don, vnto the great comfort of the sick people, & safegard  
of their liues, where many a man before they perished & de-  
cayde: & while I thought I had to haue staied, behold, wars  
followed, and controuerisie arose, whether the cure of woundes  
made with common gunpowder and shot, were like to inue-  
nomed woundes, or else woundes infected, which controuerisie  
to decide, I thought for the tyme necessarie, and haue com-  
piled a little volume, confuting the aduersaries opinions, &  
establisshing myne owne, & yet further saying what want  
the



the Obstructions hap. of god and any such medicines hea-  
 longing to their art. I have take out of best authors, such  
 as might serve herein their necessarie use, adding thereto  
 such expert medicines as I have both invented and proved:  
 and this booke I have called my Antidotarie, all which I  
 hope, I shall require thee hartely to take in to good part, as  
 I doe offer with free heart, and love to most both thee and  
 others. And here I may not forget Maister D. Cunningham,  
 who was no small helpe to me in printing the arguments,  
 and perusing the copies written, whose travails in this  
 behalfe, I commend to thy thankfull minde, loving reader,  
 there now resteth no more, but to commit my tookes with  
 my selfe, unto thy judgement: praying thee where the er-  
 rours have escaped, both to pardon the same, and also to give  
 me warning of them. Thus doing, thou shalt encourage  
 mee during lyfe, according to my small knowledge, to tra-  
 vaille in this my vocation. Fare heartely well, loving Rea-  
 der, at my wyse house in London, the xii. daye of Septem-  
 ber, 1563.



**THOMAS GALE CHIRVRGION,**  
unto those that desire the knowledge of Chi-  
rurgie, greeting, &c.

**T**wo things there are (to be lamented) which  
chiefly haue brought the most noble and ancient  
arte of Chirurgerie to extreme decay and ruine:  
one is, that every person good and bad, learned and  
unlearned, Chirurgeon or no Chirurgeon, doe without pe-  
naltie and correction of lawes, freely take on th<sup>e</sup> the p<sup>r</sup>ac-  
tise of Chirurgerie: The other thing is, that the Chirurge-  
ans them selves (I speake for the greater number) are but  
worthie professors: The first we cannot reprove, but lament. The second  
somewhat we both can and will labour to amend. For the  
greatest number of Chirurgeons (I meane those that are  
thereunto lawfully called) are so rude and unskillfull in  
their art, because they haue no methode, no exact way, or yet  
order in learning the grounds and principles of Chirurge-  
ry, either set out of any author, whome they are able to un-  
derstande, or else taught of their masters and tutors, of  
whome they should be instructed, so that they are confu-  
sed in their studies, and make rather a wild chace, then a  
perfect arte of Chirurgerie. And how come it to this point, that if they can get  
this recepte, and that recepte, as they terme it, they thinke  
they made no further neede? So that the more receptes he  
hath, the greater Chirurgeon he thinke himselfe to be:  
such ignorance is more cunning, that receiveth barely the  
bell. The cause of Chirurgerie is quite so dark and un-  
garded. For if you shall come to one of these great mas-  
ters with their receptes, and aske him what Chirurgerie  
is, what is the subiect to Chirurgery, what is the ende of  
Chirurgerie, how many parts doth Chirurgerie consist on:  
they are constrained to be silent and say mum.

And if anie be impudent (as oft there are) & speake, he  
geneth

giness but a ridiculus aunſwere. And yet we will think a  
maſter maſter to be called aſtaticke. Double that which  
cannot tell (being required) what his art is which he pro-  
feſſeth, although he hath never ſo many instruments and  
toolcs. For the arte conſiſteth in the right uſe of the instru-  
ments, and not onely in having them. Which uſe is gotten  
firſt by learning the art, and then by exercising the ſame.  
And to learne the arte is required a method and order,  
for without it, you ſhall never exactly attaine the ſame.  
Wherefore we now according to our ſmall power & ſimple  
knowledge, bearing the promiſe, and hereby doing the  
duty of the ſame, have ſet out the ſecond part of this  
cancerie in this preſent volume, containing the principles  
and ſure grounds of the arte in ſuch order and methode, as  
ſhalbe moſt convenient for the young ſtudent. And if I have  
not heretofore performed that which I deſired, yet I have given  
occaſion to thoſe that are better learned, to ſet out a more  
perfect book of this argument. And I thought good to make  
it Dialogue wiſe, for that it is moſt apt to teach & instruct  
by. For by this meanes all doubts may be both demanded  
and alſo answered ſollicite. And for becauſe it is the firſt  
booke that one muſt reade which ſhall learne the art, I have  
named it The Inſtitution of a Chirurgion, in which he ſhall  
learn not onely what his art is, but alſo what manner of per-  
ſon he muſt be himſelfe, and what conditions are in him  
required. Furthermore, what inſtruments he muſt be pro-  
vided with, and how he ſhall in time and place be ſer-  
vible to the profit of the patient, honour of this art, and his  
owne wealth. Wherefore there reſteth nothing, but that  
you take theſe my labours with ſhewſhallie, and reade them with  
gentleſſe. If are beautifulle well, I forget not to ſpend thy time  
to the profit of the common weale. At my houſe in London  
the 10. of June 1594.



# AN INSTITUTE

## on of a Chirurgion,

containing the sure grounds & prin-

ciples of Chirurgie,

Thomas Gale, Doct.

The Interlocutor.

Io. Yates, Tho. Gale, Jo. Field, Chirurgions.

John Yates.



Phœbus who chaseth awaie the darke and  
uncomfortable night, casting his golden  
beames on my face, would not suffer me to  
take anie longer sleepe, but said: Awake for  
thanie, and behold the handie worke of our  
sister Flora, how she hath renewed the earth

with most beautifull colours, mervailouslie set in trees,  
plants, hearbes, & flowers: insomuch that the olde and we-  
thered coate of winter is quite done away, and put out of  
remembrance: at which words of Phœbus my hart quickned  
in me, and all desire of sleepe was eft soones forgotten: wher-  
fore I am now come into this beautifull meadow to recre-  
ate my selfe, and gather some of those pleasant hearbes and  
flowers which here doe grow. But let me see, me thinke I  
percelue two men walking together, and reasoning albe ve-  
rie earnestlie. I will approch nearer unto them, perchance  
they be of my acquaintance: Surelie I should knowe them.  
I am deceived if the one be not my friend Th. Gale, and the  
other Maister Field. It is so indeede, wherefore I will go &  
salute them. God that hath brought vs together into this  
place, make this date prosperous & fortunate unto you both.  
Tho. Gale. Brother Yates, the same doe with unto you,  
and you are welcome into our companie.

John Field. What rare and pleasant morning wilt not  
suffer

suffer Maister Yates to keep his word, but hearing the title, he cometh the helde, to seeke out some draughts bearded, vnto him yet vnknewen.

John Yates. I must of force confesse, that you doe hit the naile on the head, but since my happe is so fortunate as to meete with you both, and that now in this pleasant morning, I would leade off my former determined purpose, and require you to enter into some talkes of Chyrurgerie. For since you both were brought by vnder maister Ferris, (being now Sergeant Chyrurgion vnto the Quenes Maie-  
tie) one, at whome both for his knowledge and experience, you did not a little profite, and also that you haue had long practise your selues, you shoulde me much more pleasure me, and profite other, for so may it come to passe, that it might be in the place of an Institution, vnto those that shal hereafter desire the knowledge of Chyrurgerie.

The Gale. Your request is honest, and reasonable, and therefore not to be denied.

John Field. When were about the like thing when as you saluted us, wherfore regarding our first talke, we will accom-  
plish your desire.

John Yates. I haue read many authors in Chyrurgerie, and yet finde small profit by them.

The Gale. What be the names of your authors?

John Yates. Theodoricus, Brunus, Lombardus, Rolandus, Rogerus, Bartholomaeus, Guilielmus, Guido, Brunswicke, and Nage.

John Field. What part of Hippocrates, Galen, Auicenna, Rhasis, Auenariss, and Hahabbus haue you read: these be of greater authoritie, and of whom you shal learne sound doctrine.

John Yates. Which these I haue not been much acquainted.

The Gale. Well, then the next waie is, that you do put out such questions as you would haue answered, and stand in doubt, and also answered to, that which shal be demanded.

John Yates. Right gladly, for there is no waie by which I shall so much and in so short a time profite.

John Field. Truth it is, wherfore let us begin without further

Further detending of time. Tho. Gale. When saying our talke shall beholle be the first  
stitution of a Chirurgeon, it were meete and convenient first  
to knowe what Chirurgerie is, & wherofe use and were  
we. I pray you, what call you Chirurgerie?

John Yates. Guido de Cauliac (in his booke which he  
calleth his Colledge) defineth it of this sort: Chirurges  
is a part of Therapeutike, healing men by incision, vltion,  
and articulation.

John Field. Those wordes were taken out of a Booke at-  
tributed to Galen, being intituled: Introductio, seu Medicus,  
but he thought not that called it corruptio Therapeutike,  
but Therapeutike. For Therapeutike is that part of phi-  
losophie which teacheth: this part consisteth either in curing by  
convenient diet, either by medicines, or else by outward use  
of the hand. Where Galen, (in that which was the author of  
the booke above saide) affirmeth, that that which healeth by  
the hand, is a portion of the curative part, this helpeth men  
by incisions, vltions, and reducing the bones in their natu-  
rall state.

Tho. Gale. Yet this is no perfect definition of Chirur-  
gerie, because the definition both containe in it so much, as  
to Chyrurgerie is required.

Io. Yates. When you shall heare another definition out of  
Guido. He saith, Chyrurgerie is said of this Greeke word  
Ciros, which signifieth an hand; and Gyos, that is, tooke, or  
operation: as who should saie, Chirurgerie is the science of  
working by the hand: how like you this definition?

John Field. Worse than the other, both for it is no de-  
finition, but onely the signification of the name: and also for  
that Cirox and Gyos, be no Greeke wordes, which shoulde  
shewe that either Guido was no Grecian, or else that his  
wordes are corrupted.

Tho. Gale. Truth it is, for Chirurgia is derived Apò τῆς  
χειρὸς καὶ τοῦ ἐργου, but both the description of Chyrurge-  
rie, and also the Etymologie and signification of the name,  
both right well shewe what Chyrurgerie is, although it be  
no answer to our demand.



John Yates. When I praye you let me learne at your  
hands what is the true and essentiall definition of Chyr-  
urgerie. *Thom. Gale.* Right gladlye. Taken in his booke of medicine  
in all definitions, saith, that Chyrurgerie is the quicke and  
readie motion of steadfast hands with experience: by an  
artificiall action in Physicke, done by the hands, whereby  
is obtained the desired scope. So that you may by these  
wordes hether to alleadged out of the Introduction, and the  
booke of medicinall definitions, forme a definition on this  
wise. Chyrurgerie is the art which cureth those infirmities  
and griefs of mans bodie, which are to be done by right vse,  
and application of the hand. *John Field.* In this definition is to be noted, that Chyrur-  
gerie doth not curiall griefes which require help of y<sup>e</sup> hand,  
but onelie such as are curable. Also it is to be understood,  
though in the definition is put no other titles of curing  
those griefes, but by the right vse of the hand, yet Chyrur-  
gerie hath neede both of that part which cureth by diet, and  
of that which helpeth by medicine. As is most evident and  
cleare in great inflammations, as also in those bodie in which  
Cacochymia (that is to saye ill Iuse) is found, where the hu-  
mours are defiled and corrupted. *John Yates.* When it should seeme that Chyrurgerie is  
so joyned to the other two parts, it can not be well separated  
from them, although they be now two distinct artes. *Thom. Gale.* Truth it is, and in the beginning Physicke &  
Chyrurgerie were both one, and one man exercised both, so  
did the Princes of Physick, Hippocrates and Galen.  
*John Yates.* When I perceive that Chyrurgerie is not  
so base as it is taken for, and that it is of great antiquitie,  
being the most ancient part of Physick, it was exercised of  
Emperours, Kings, Philosophers, and Physicians. *John Field.* The basenesse of it, and the small estimati-  
on, cometh of the buttered and rude Empericks, who  
take on them the office of a Chyrurgion, when as they  
know nothing lesse, then what Chyrurgerie meaneth, but  
as touching the antiquitie of Chyrurgerie, you shall not be  
decei-  
leus

same be, but regard the words of Cornelius Celsus (which are written in his seventh booke) who saith. Hec pars cum sit vetustissima, magis tamen ab illo parente omnis Medicine Hypocrate, quam a prioribus exculta est. This part of Physicke (saith Celsus) being the most ancient, yet it was more increased by Hypocrates (the father of all Physicke) than of all those that were before his time. Here you may perceiue that it is the most ancient and eldest part.

Tho. Gale. The same Celsus also setteth out certaine notable persons, who haile more and more did augment the art, for it did flourish in Aegypt by reason that Philoxenus did exercise it. Also Gorgias, Soranus, Hieron, the two Apollonij, and Hammonius of Alexander. At Rome also Tryphon and Euelpistus and Neges, were right excellent in Chyrurgerie, and by their learned woorkes did cause the art not a little to flourish. Podalius and Machaon (the sonnes of Aesculapius) being with Agamemnon in the Trojan warres, cured the wounded souldiers, as Homere the Greeke Poet affirmeth.

John Field. All these, as you saie, were right excellent in Chyrurgerie, and famous also, chieslie for curing of wounds and Ulcers. In like sort was Chiron, Centaurus, and Achilles, with diuerse other.

John Yates. Seeing that I haue learned that Chyrurgerie is the third part Therapeutike, what Chyrurgerie also is, of the antiquitie and authoritie of the same: I woulde gladlie vnderstand of how many partes it doth consist and stand on.

Tho. Gale. It hath two partes, the one called Theorike, containing the speculation and knowledge, the other Practike, which is the manuell operation and exercise. The Theorike parte is obtained by demonstration and exact knowledge of the principles of the art, and this both doth inuent, and teach what is to be done, which waie, and also by what meanes. This parte a man may perfectlie knowe, although he neuer doeth exercise anie portion of the Practise: the Practike part is found out and inuented by reason and experience, and it doth require a ready exercise the same

things that the Theorike hath taught. This part no man can exactly obtaine, except that both he both see other which are skilfull in the art to worke, and also diligentlie exerciseth it himselfe, ever bearing firme in minde both what he hath seene of other men brought to good end, and what he hath also done himselfe.

John Yates. When seeing that you have offered unto me how many parts of Chirurgerie there are, I praye you first begin with the Theorike part of it, and let me understand exactly what it is, and that being finished, proceede to the practise.

John Field. To set out the Theorike, it will be profitable, but as touching the practise, it were both superfluous and vaine, seeing that the perfect curation of Apoplexies and tumours, are set out in the booke of tumours against Nature. Also the true and exact cure of vlters, is at large opened in another worke, whose Title is, A perfect and exact methode of curing vlters. Furthermore, the practise of healing woundes both in similer and instrumentall parts. Also of fractures and luxations, you shall finde in his Enchiridion of Chirurgerie. And as touching woundes made with the common Gun powder and Pellet, you shall receive the true and methodicall cure, in a Treatise bearing name, Of curing woundes made with Gunne shot, in which Treatise is set out, and also manifestlie confuted the grosse and fond errors, not onelie of Iohn Vigo, Alfonce Ferrus, and Hier. Brunwicke, ( which make the hottie venimous, and consequentlie the wounde therewith made, and so the cure to be lyke as is in venimous woundes: ) but also by demonstration he overthroweth all those that be of that opinion. So that for the practise parte, I do not see what is moze to be desired, except it were some Treatise, in which might be comprehended the art of Phlebotomie or letting of blood, and also of scarification and boring, which I hope ( God graunting him lyfe ) he will hereafter set out.

John Yates. These be a number of worthe booke, which doe containe the practise of so worthe an arte, God graunt you



you long life Maister Gale, to accomplish that you haue yet  
behinde.

Thomas Gale. Although some perchance more busie  
than learned, and yet more learned than discrete and mo-  
dest, and yet perchappes more discrete and moell, than a  
fauourer of those that trauaileth for the profite and vili-  
tie of other, haue not a little lifted by the groine, and bent  
the bowe, and with manifest wordes of contumelie rewar-  
ded me: yet the loue of my Countrie, and desire to profite  
those of my profession, shall ever be a sufficient spurre to  
promoke me to continue as I haue begun, for true it is that  
the Poet Pertius writeth.

Fœdix a tergo quem nulla Ciconia pinxit.

Which may right well be englished, although not ver-  
batim, yet in meaning on this or like sort.

O happie man that such hap hast,  
thy path to tread so right:

That no serpentine tongue will carpe,  
Or long-bild Storke eke spight.

But retourne we to that from whence we are some-  
what digressed, our talke and communication at this pre-  
sent, shall not further extend, than to institute the Chirur-  
gion in the Theorike part of his arte. Wherefore since  
you haue learned what Chirurgerie is, with diuerse other  
apt and needfull thinges: it doth behoue you to knowe  
the subiect of Chirurgerie. For all Artistes and work-  
men haue their subiectes and matter on which they doe ex-  
ercise their arte. So the Mason hath stones and Bricks,  
which according to his arte hee beueth, squareth, cutteth,  
and proportioneth. In lyke sorte doth the Carpenter with  
Wood and Timber, and the Smith with Iron. All which  
bee accounted subiectes to these artes. And if the Mason,  
Carpenter, and Smith bee so curious and diligent in  
knowing, chusing, and considering of Stones, Timber, and  
Iron, which bee thinges of no great valure or estimation,  
howe much more then behoueth it the Chyrurgion to  
knowe what the subiect is on which hee must exercise  
his arte.

John Yates. You haue rightly ſatue, and by theſe ſome  
wordes I gather, that the ſubiect to the arte of Chyrur-  
gerie, is that which is to phyſicke: I meane mannes bo-  
die being apt as well to ſickneſſe and infirmitie, as alſo  
to health.

John Field. You haue rightly anſwered; but this  
is not ſufficient to anſwere that mans bodie is that ſtone,  
timber, yron, and matter, wherupon the Chyrurgion muſt  
exerciſe his arte: except you alſo doe knowe the partes of  
mans bodie, their ſituation, nature, and office, as of bones,  
cartilages, ligamentes, nerves, veines, arteries, muſcles,  
fleſh, and ſkinne. For I thinke no man ſo rude, but doeth  
conſider, that without the perfect knowledge of theſe, howe  
eaſilie he ſhall fall into intollerable errors, eſpecially in  
phlebotomie, in fractures, and luctations, and whereas occa-  
ſion is offered, to make incision.

John Yates. The more I heare you ſtwo ſpeake of Chy-  
rurgerie, the farther me thinke, I finde my ſelfe from the  
knowledge thereof. And ſo much the rather, that by your  
wordes I gather, how that the ſubiect and matter of Chy-  
rurgerie (being the bodie of man,) cannot be fully knowne  
without the exerciſe of the Anatomie. Wherefore I can-  
not a little marvelle at ſome, who being Chyrurgions  
in name, doe not onelie neglect this knowledge of Anato-  
mie, but alſo enuieſe thoſe that doe therein tranſaſſe.

Tho. Gale. Well, let ſuch go with their wilfull blindneſſe  
and obſtinate ignorance, and let vs now conſider what the  
end of Chyrurgerie is.

John Field. I ſuppoſe that maſter Yates knoweth that  
the end or intention of Chyrurgerie, is to heale all ſuch cu-  
rable infirmitie, as are to be cured by the office and due ad-  
ministration of the hand.

John Yates. I render to you both heartie thanks, ſo that  
by your talke I have learned what Chyrurgerie is, the an-  
tiquitie of it, and noble authoꝝ y<sup>e</sup> did profeſſe it, of how ma-  
nie parts it doth conſiſt on, alſo what is the ſubiect or matter  
on which the Chyrurgion doth exerciſe his art, and what is  
the end or ſmall intention of Chyrurgerie: nowe I will  
further

farther desire you to shew me the way to procede in learning and obtaining this noble and famous arte.

Thomas Gale. Before we set out the waye how to attaine & knowledge of Chirurgerie, it is convenient to shew what manner of man a Chirurgeon should be, whome we should instruct in this arte. For manifest it is, that all men are not to be admittes into this myserie.

John Field. Truth it is, for according to the prouerbe. The diuel made a souter a shipma, signifying hereby, that nature repogning all thing is in vaine. How vnapt & unfit thinke you, is a swine to be taught to hunt: surely as vnapt, as a hound is apt & fit: but in the admission of one to learne our art, is to be noted the giftes of nature, & also education from his infancie. For if men exercising artes of lesse estimation and pryce, doe with diligent care chole such as are fit for their facultie and arte: how much more ought the Chirurgeon so to doe.

Tho. Gale. It is surely so, and the giftes of nature requires in him that should be a Chirurgeon, Cornelius Celsus doth name to be these. He must be a young man, hauing a sure and stedfast hand, voyde of trembling, & that he hath the vse of the left hand, as well as of the right, a sharpe and quick sight, one voyde of all feare, without foolish pittie: so that he be not moued any thing by the clamor and noyle of the patient, but minding to cure him, whome he taketh in hand, he shall neither halt more then is meete, or yet make lesse incision then is requisite. Hippocrates in a booke intituled Lex Hippocrates, speaketh of him that shall learne Physicke, in this sort. Quisquis enim medicam scientiam vere sibi comparare velit, huius Ducibus, voti sui compos fiet. Natura, Eruditione, Loco studijs apto, Institutione a pueritia, Industria & tempore. Primum panque omnium, natura est opus. Hac etenim repugnante, vixta sunt omnia, at si ad optima vitam natura demonstrat, artis eruditio facile eueniet: quam quidem prudentia sibi comparet oportet, ita vt ab ipsa pueritia institutio accedat, atque hoc in loco disciplinis quidem conuenienti. Preterea operam sedulo nauare oportet: eamque ad longam certe tempus, quo ipsam insita disciplina, feliciter



Eius, & cum profectu fructus suos ferat. Who so ever (saith  
 Hippocrates) will learne the arte of Physicke, following  
 these guides, he shall have his desire. Nature, learning, an  
 apt place for studie, god bringing up from the childhood, di  
 ligence, and time. For first of all nature is to be looked for.  
 For nature repugnning, all thinges are frustrate. But  
 if that nature be inclined unto the best thinges, the know  
 ledge of the art will easely followe; which it becometh  
 to get through providence, so that frō the childhood he be well  
 framed by, & that in a place apt for studie. Furthermore he  
 must bestow great diligence, & that for a long time, so that  
 learning (being now grafted in him) may happily, & that  
 with increase, bring forth his fruites. And Hippocrates re  
 sembleth the studie of Physicke unto agriculture or tillage.  
 For (saith he) what consideration is of those thinges which  
 the earth bringeth out, the lyke in all points is of y<sup>e</sup> know  
 ledge of Physicke. For our nature is as it were y<sup>e</sup> field, the  
 disciplines of teachers, are like the seedes; also the insti  
 tution and bringing up from the childhood, is resembled to the  
 casting of seede into the ground in behoove & convenient time,  
 the place in which he must learne, is as it were the ayre,  
 giving nourishment to such thinges, as spring out of y<sup>e</sup> ground.  
 The industrie and diligence bestowed in the arte, is lyke  
 the tillage of the plowman, & last of all, time doth streng  
 then these, & suffereth them perfectly to be nourished. And of  
 this time speaketh also the poet.

*Affiduo illis durum canat Vindula Saxum.*

The watry droppes, so moyst and soft  
 Doth pearle hard stones with falling oft.

John Yates. If this should be observed among phisitions,  
 I do not doubt but that they should be more famous men among  
 vs, and fewer rude & bustling empiricks; but this touch  
 eth nothing the Chirurgion.

John Field. As much as the Phisition, so doe you not  
 remember, that Hippocrates comprehendeth Chirurgerie un  
 der Physicke, being one portion of the curative part.

Tho.

**Tho. Gale.** Altho teaching education, Hippocrates in his booke called De Medico, would haue a Chirurgeon follow the warres. For he speaking of the other parts of Physicke saith first is the Chirurgerie of wounds received in the warres, and extraction of darts and things in them fixed. For seldom or euer any infectious diseases chance in all times, yet in externe and outward warres, these chance most commonly. Wherefore he that will be this Chirurger, it becometh him to frequent the warres, & follow outward armies, and hostes of men. For so shal he be exercised for that necessitie and vse.

**John Field.** In reede to vs Podalirius, Machaon and Achilles, with other more, of whome mention is made.

**John Yates.** Yea, but many Chirurgions will not occupie them selues in learning those parts of which they haue haply exercise. Much lesse then cometh to follow the warres, they haue not such a burning zeale vnto their arte.

**Tho. Gale.** The more pittie, not for their cause, but for the common weales.

**John Yates.** If all these points are required in him that should be a Chirurgeon (as I must confesse they are) how happeneth it, that there are an infinite number of Chirurgions in name, which haue scarce one of these fornamed gifts. And if they haue any, it is boldnesse, for that wanteth not in them, they are as bold, as blinde bayard.

**John Field.** Yea, but where Celsus praiseth boldnesse in a Chirurgio, he meaneth the vertue called fortitude, which wher as necessitie doth require, is not moued with feares, countenance, & clamour either of the patient, or of the standers by, but minding the health of the sick, according to art, maketh incision, and doth such lyke things.

**Tho. Gale.** And to aunswere you, why there are such a sort of rude emperiches, yea, Hostlers, Tailours, Fletchers, Spinstrales, founters, Jugelers, witches, bandes, & to conclude, (an infinit number which heretofore were prohibited the exercise of this arte) such as otherwise cannot get any living: is for that Chirurgerie is now, as it was in the time of Hippocrates.

who

the last, & other arts are not exercised without labors & penallities, but Chirurgery is free for all persons, & more so by pittie, wher as to much hurt & damage by deeply spying, the rough & abuse of so noble an arte, so y<sup>e</sup> more men haue perswaded, that Chirurgery is not partly, or neuer, gather strength againe, & loseth except the points hauing compassed of pure deplorable Chirurgery, & such by vertue of lawes drue away from hit, these were fornamed enemies.

John Yates. But yet I see inuallie at those which are as it were Chirurgions by profession, knowing themselves boorde of a number of the points required in a Chirurgio, that for loue to their countrey, and common sake, they will not yet at the least chose such seruants, as haue some of the fornamed vertues. Which if they do, these will yet some hope that Chirurgery should hereafter flourish.

John Field. Their aunl toere is, that when the day fall we shall haue Larkes. They thinke that they should not haue seruants to serue in that vocation. For I see (say they) that haue well bzought by their sonne, will put him to the arte, because it is accounted so beggerly and vile. Where as in deede, if for a season they would take y<sup>e</sup> more paines themselves, & admit none, but such as should be somewhat meet, there would be a number glad to studie the arte, because it would come to estimation, and be a wholsomefull lining to the professor. But shall I shew you what I thinke is the chiefe cause, science hath no greater enemy, than ignorance, & also the proverbe is true, like will allway to the like, and hereof commeth it, that such carpenter such chippes, such maitter such man.

John Yates. Yet me thinketh y<sup>e</sup> one may be a good Chirurgion, though he haue not all the points reconed of Hippocrates and Celsus. As one might think himself right happy, though he neuer did attaine to Aristoteles summum bonum, or Plato his Idea.

Tho. Gale. It is one thing to say a good Chirurgion, and an other to say an excellent Chirurgion. But let that passe, I would we had good Chirurgions. And because the descriptions of Hippocrates and Celsus touching what manner of man



of man a Chirurgion should be) someth somewhat to sraist  
to you : I will shew you what conditions Guido requireth  
in him. Not so; that I doe preferre the authoritie of Gui-  
do before such fathers and parents of Chyrurgerie, as both  
Hippocrates and Celsus were, but because perhaps Crassa-  
crallus conueniunt magis. Guido requireth foure things in  
him that is or should be a Chyrurgion. First, that he should  
be lettered : secondlie, that he should be expert & skilful, that  
he be ingenious, and last, that he be vertuous, & well man-  
nered. These words you shall finde in his Collectorie.

John Field. And as touching these foure pointes, note  
first, wher Guido saith he must be lettered, he doth meane, he  
should be learned, & that chiefe in such doctrine as is in his  
art requisite. That is, at the least he can write, reade, and un-  
derstand the minde of the Latine author. If he had know-  
ledge in Geometrie for making his incision, for curing frac-  
tures and luxations, and also in curing malignant vlcers,  
knowing what figure would most speedilie unite & ioyne  
the lips of the vlcer, it were verie commendable. Naturall  
Philosophie is a goodlie or nature to the Chyrurgion, for it  
sheweth him what resulteth when as there is diuerse and  
 sundrie simples mixed together : but I will go to the second  
point : he must be expert, that is, he must be garnished with  
much and long experience, which is errogitated by firme &  
certaine reasons, and by them also confirmed, other wise hee  
is to be accounted rude, & an Emperike, if he hath not reason  
annexed and ioynd to his experience. Thirdlie, saith Gui-  
do, he must be ingenious, vnto which there are fve thinges  
principallie required. First, is the readie and good concei-  
uing, then a firme and sure memorie, next a sound & right  
iudgement, after an easie calling thinges to minde which  
he haue heard of, seen, and last, a linelie and sharpe readi-  
nesse in finding and inuenting remedies. The manners  
which Guido would haue in a Chyrurgion, are reckoned of  
Hippocrates and Celsus, which briefelic I will number :  
they must be bolde and without feare in such cures as are  
without perill, and, whereas necessitie requireth. Also in  
cures that be doubtfull, not to be rash & hastie, to be gentle  
and

and courteous, toward the sick patient, to be friendly and obliging, toward those of his profession, also, with and circumspect in Prognostications. Last of all, he must be chaste & temperate of bodie, mercifull toward the poore, and not to greedy of money, and this is sufficient touching the description of him, that must be admitted in Chirurgie. Now let us talke of the Instruments wherewith a Chirurgion ought to be garnished.

John Yares: That is wel saide, and of those Instruments I would gladly haue understanding.

Thomas Gale. And to you shall, and so; the surer and sounder doctrine, you must note that instruments are talen two manner of wayes, so; either they are medicinall, or else instruments of metal as Iron, Leade, Tinne, Copper, Silver, and Gold. The medicinall instruments are medicines, as potions, emplasters, cataplasmes, cerotes, vnguents, oyles, balmes, trochiscs, waters, and such other. But principally as touching vnguents, a Chirurgion (after Guyde his manner) ought alwayes to haue in readiness fine sundry vnguents, answering to fine intentions curative of Chirurgie, is to saye, so; to suppurate and maturate, he must haue Balsicon, to mundifie and cleanse, Apostolicon, to incarnate and cause flesh to grow: he shall prepare vnguentum Aureum, to conglutinate with, he shall vse vnguentum Album. And where as any accident chaunce, as dolour & paine, he shall occupie vnguentum Dialcheum. But I shall not neede to make any longer processe of medicinall instruments, when as I haue (as I suppose) abundantly shewed in my Antidotarie, not onely all the principall intentions curative, required in Chirurgie, but also haue set out medicinall instruments, both simple and compound, required in this art, as also their compositions, vse, and vertues. There are also set out, proper medicines, dicated and apted to the severall parts of mans bodie, as heau, breaust, stomache, longe, liuer, spleene, kyndes, bladder, and such lyke, as is proued of Galen in his booke intituled Secundum locos. Although many be of the contrary opinion. And among the rest, I will shew you a notable historie, I thinke to many knownen, as well

Whist.

Whistons and Chirungions, as other most famous surgeons  
It fortuned in London 1562, that there was a fray made  
and the one was thrust through the breast under the papp  
and out under the left shoulder blade, so that of force the  
lungs were perced through. There were diuers Whistons  
called vnto the wounded patient, & they all affirmed con-  
stantly, death to follow. I also being called vnto the same  
patient, did also affirme, that death would follow, except he  
receiued a certaine posion, of which I had experience in the  
like case in the warres, in England, Fraunce, Scotland, and  
other places: and he in deede receiued it, and so the lunges  
were preserved from putrifaction, & the congeled blood was  
expelled out, the wound clenched, and finally, by the arte of  
Chirurgerie he was restored to his perfect helth.

John Yates. That man doe I right wel know, his name  
is Henrie Smith, a master man, he was hurt at Queene huss,  
and he is yet liuing, and in good health.

John Field. Well then, let vs speake of metalline instru-  
ments, of which some of them are general: so called, for that  
they doe generally serue in all wounds and vlcers: & there  
are particuler instruments, seruing to seueral vices, or parts  
of the bodie. Yet haue I hard that diuers affirme, how that  
in wounds generally, there needeth no other instruments,  
then an incision knife, to dilate and enlarge the wound, &  
so with the fingers to take out the things fixed, whether it  
be pellet, splente, arrowe head, or what else so ever it be: but  
the errours of these are so grosse, as requireth no aunswere,  
seeing that through such kindes of incisions, it happeneth the  
great veines and arteries to be cut, & so great flux of blood  
to follow, (beside the dolour and paine which followeth, &  
many times losse and mutilation of the membre) as is in  
no case tollerable.

Thomas Gale. Truth it is, but touching generall in-  
struments, those which are in most vse, and ought to be had  
in readinesse of the Chirurgion, are these: incision sheares,  
an incision knife, a setume, a lance, and all this serues to cut  
and enlarge a wound.

A cauterizin y<sup>eo</sup> to cauterize the stach flux of blood, a paire  
of



of pliers or nippers, to take of plasters, islegants, and things fixed in the wound, a probe to search the wound with, a crooked hook, a needle and a quill to sewe and stitch with.

John Yates. And what be the instruments which are called proper :

John Field. Proper instruments are these : a Crappan, serving to the head, when as the skull or cranium is fractured, Speculum oris, and Speculum matricis, also gossipium, serving for lacerations and fractured bones, a Stringis masculine, and also femine setons for the necke, Alenatoxe and long needles of wood, to draine through the wound: also gossibills, Crowebills, and diuers other described and set out of Albucasis, Celsus, Tagalcius, and others.

Tho. Gale. These instruments be of meruallous vse, & without which the Chirurgion can neither perfectly, nor without great griefe and perill, doe that is required : and among the rest, in my iudgement, the Crappen is most necessarie, and of an excellent invention in hurtes of the head. For without it where cranium is fractured, brused, or else any of the inward pammicles depressed, you shall little preuaile. I my selfe haue vsed it with greate profite diuerse times, and especiallie once in Cambridge there, which I would declare vnto you, but that I should be somewhat tedious.

John Field. Nothing lesse, but rather pleasant, for by uttering of things done great profit may arise, & we haue decreed to spend this daie in the talke of Chyrurgerie, wherefore we desire you declare that historie, and we will giue diligent care.

Tho. Gale. Right gladlie. Anno. 1559 : a seruant of one Mr. Wroths riding to the feldes, and leading a young horse in a halter, tied fast about the arme of the seruant, the horse being wilde and not broken, starting aske, vnboyled the man, and drue him by the arme about a great field, so long, that what with striking, what with drawing, halting, and pulling, being wearied, he stode still vntill companie came and vnloosed the halter, and took by the man halfe dead, and conueied him vnto his masters house. Chyrurgions were sent

sent for, who finding the servant speechless, and without red  
remembrance of him one whom he knew, he not perceiving  
the cause hereof themselves, neither yet could be the loss of  
the patient the place affected, departed and left him un-  
rable. Dr. Wroth sent for me, and I seeing him speechless and  
without remembrance, came down the hinder parts of the  
head to be hurt, and first ten of the bone, which I was more  
certainly, when feeling that part, I found it soft. Where-  
fore I taking off the haire, did first make incision, and af-  
ter that set a Crappan on his head, and boied Cranium  
through, and take out the piece of bone, which done, there  
issued not much blood, blacke in colour, and as being to per-  
fection out of the ruptured and broken vessels, the next  
daie following the servant spoke, and came againe to his  
perfect remembrance, and I using things in this cure as art  
required, God restored the man in my hands to his perfect  
health. I could also shew you other examples, where the  
like accidents have happened, and the Chyrurgions other-  
not knowing, or wilfully neglecting this profitable instru-  
ment, have brought the patients to their last end. So hap-  
penced it to a servant of Maister Pagets in Whilpot lane,  
1538. and diverse other, whom for brevity I do let passe.

John Yare. This was a too, this vice, and this is a no-  
ble instrument, but the Chyrurgions which neglect the use  
of this or the like instruments, are of the opinion of that the  
rude Cooperike Smith was, who in a foolish booke of his  
published, did inueigh against Chyrurgions which trappa-  
ned the head in anis grise of the same, and seemeth to him-  
selfe as if were another Thesalus to overthrow the famous  
authors and inventors of this instrument, when (in the  
iudgement of the learned) he was no more to them compa-  
rable, then the light of a sparke of fire is equall to the most  
radiant and shining beames of beautifull Phoebus.

John Field. This now spoken of instruments, (which is  
Chyrurgion must have in readinesse) shall suffice, now let  
be shew the methode howe both the person beinge fit to  
be admitted to Chyrurgerye, may learne the art, least that  
confused he learne that first taught should be last, and so

let the rest before the horse, to his no small hindrance.

Tho. Gale. And for this there is to be followed and obserued two precepts: first, that we proceede from things common unto those which are particular, or from things vniuersall, unto more particular. As first to know an inflammation, then how many kinds of inflammations there are. The second precept is, that we begin at things knownen, and in proceede unto those which are lesse knownen, as first in the curation of wounds, we must beginne with a simple wound, which done, we shall proceede to the curation of compound wounds. So in like manner in blisters, first to know & cure a simple blister, and then to take in hand compound blisters, beginning with those that are lesse compound, & haue smallest accidents, and so to proceede unto those & are more compound, & haue most & greatest accidents ioyned with the: the like is also to be obserued in other arts & sciences, as in iudging of colours, first to know white & blacke, then other colours, which are not so manifest, according as they come & spring of & mixture of these two, now knowing & collecting these ii. precepts, it is necessarie for & right use of his instruments medicinal & metalline, to consider two things, & is to say, things called according to nature, & things against nature.

John Yates. I praye you what are those which are called according to nature: and how many be they in number?

Io. Fr. Guido. nūbereth those things which are called according to nature, to be sure, & is to say, helth, & cause of health, & effect of health, strength, custome, & cōplexion. And health is defined to be an effect according to nature, apt to perform the actions of the same.

John Yates. And what doe these five things according to nature teach and shew me?

Tho. Gale. Because the Chirurgion is natures friend, & minister, these shew you that you must conserue and heape them by their like, and also to expell their contraries, which would destroy and overthrow them.

Io. Yates. And wherof are these five things spaking, & by what things shal I conserue them? although you say vnto me, & they are conserued & kept by their like, yet is it not sufficient to my vnderstanding, except you shew me what they are.



John Field. I will tel you these vi. things, which are secundum naturam, spring of seven naturall things; entering the composition of mans bodie, that is to say, foure elements, fire, aire, water, earth: completions, as hot, cold, moist, and drie, foure humors, blond, choler, fleume, & melancholie, members of mans bodie: vertues animall, vitall, & natural, with their operatibns & spirite, of these seven natural, springeth health, & other rehearsed, which are according to nature. The conservation of health doth consist in y<sup>e</sup> right vse of vi. things, named in latine, res nō naturales, like as in y<sup>e</sup> abuse of the, the decay of health & breeding of sicknesse and infirmities followeth.

Tho. Gale. It is right so, & these sixe are called, aire, meat, and drinke, motion & quiet, sleepe & watching, repletion, and inanition, and the perturbations or affections of the minde.

John Yates. I trust I am sufficientlie taught how to vse my instruments, according to the indication taken of y<sup>e</sup> things which are according to nature: now I pray you let me vnderstand what those things are which are against nature; how many they are in number, and what indication is to be taken of them; for the further vse of my instruments.

John Field. Those which are against nature, are so called, because they are contrarie to the same, and doe further destroy and overcome nature, & are vtter enemies to health, and these are three in number, sicknesse, y<sup>e</sup> cause of sickness, and the accident. The cause of sicknesse, is that effect contrarie to nature, which goeth afoze the sicknesse, & promoueth the same, and there are accounted of Galen, and the Grecians (whō I follow) two causes of sicknesse, y<sup>e</sup> one being outward, called Procatartike, or cause primitive: the other is within vs, & is named the cause antecedent or precedent, or cause interne. Sicknesse also is defined of Galen, to be an effect against nature, of which y<sup>e</sup> action of nature is first hurt, & vitiated. And the same Galen doth also make three kindes of sicknesse generallie, according to the parts of mans bodie, in which they are as in y<sup>e</sup> smaller parts, sickness is called intemperature, which is either hot, cold, moist, or drie, or else hot & moist, hot & drie, colde and moist, colde and drie, and if it be in the instrumentall partes, the sicknesse is named ill

constitution of conformation, but if sickness happen both to  
 similar and instrumentall partes, then it hath to names, solu-  
 tion or diuision of continuittie. Also the accident is an  
 effect against nature in like sort as the cause of sickness and  
 sickness it selfe is, but it differeth fro the in this, y<sup>e</sup> the cause  
 goeth before sickness and prouoketh it, so that the ac-  
 cident followeth sickness, like as the shadow doth the man.  
 Now this word Accident, is taken generallie, of which word  
 will nothing speake, and it is vnderstood in three straightlie  
 or properlie, so is Accident three waies diuided; for either the  
 action is hurt and quite abolished, as blindness in the eye,  
 or else diminished, as dimness of sight, or else the action is  
 corrupted, as the sight depeared and so the indication which  
 is taken of these three things against nature is not the  
 two great, (and of all men allowed) conclusions. *Contraria  
 sunt contrariorum remedia.* Also *similia conseruantur simi-  
 bus.* Like as things which are according to nature, are con-  
 serued and kept by their likes: so also things contrarie are  
 remedied by their contraries, & therefore these three things  
 against nature sheweth you that they are to be expelled and  
 put awaie by their contraries: as for example, solution of  
 continuittie being sickness both of similar and instrument-  
 all partes, sheweth that he must be put awaie by his contra-  
 rie, that is, diuision and staying againe. Also heate is put  
 awaie by colouesse: colouesse by heate: drynesse by moist-  
 nesse: and moistnesse by drynesse: & so in like sorte in other  
 sicknesses; the indication is taken of the contraries, so you  
 now vnderstand this. *John Mares.* Right well, so that now I doe perceive that  
 the right vse of my instruments medicinall and metalline,  
 in taking of things according to nature, which sheweth the  
 conseruation by like and agreeable medicines, and of things  
 against nature, which teacheth me to applie things contra-  
 rie, whereby I may take awaie all that which is against  
 nature; but if you will be so good as to set out (though it be  
 in briefe) your compend (or this) those things against na-  
 ture, which falleth vnder the handes of the Chirurgion, as  
 you haue made plaine to me those things which are accor-  
 ding

ding to nature, I should thinke my selfe so much bound, as  
hardlie I shall be able to recompence, for although I know  
that things contrarie to nature, are to be remoued by their  
contraries, yet if I haue not the exact knowledge what those  
things are, I shall verie hardlie be able to applie and vse  
their contraries.

Thomas Gale. It is surelie so, for how much wide you  
are in knowledge of the sicknesse, so farre wide shall you  
also be in finding out apt and conuenient remedies, & those  
perticular griefes or affects against nature, which are subiect  
to Chirurgerie (as Galen witnesseth in  $\S$  14. booke. 13. Chap-  
ter of his Therapeutike methode) are for the most part re-  
duced to five titles or chapters,  $\S$  is to wit, tumours against  
nature, woundes, vlters, fractures, & luxations, there be other  
things besides these, which require  $\S$  vse of  $\S$  hand, but these  
rehearsed perfectly knownen,  $\S$  other wil be easie to attain to.

John Yates. When I praise you begin first with tumours,  
and those being finished, procede to the rest.

John Field. First it becometh you to knowe that this  
worde Tumour (called in Graeke Onchos) is not  $\S$  which  
Auiacen and the Arabians name Apostema, and the Lati-  
nikes call Abscessus. For Tumour is a generall name to  
all Apostumes and Tumours, whereas this worde Apo-  
stume stretcheth no further but onlie whereas Phleg-  
mon is turned into mattier, and thre other Tumours cal-  
led Atheroma, Steatoma, and Meliceris, so that this word A-  
postume is not so large and generall a name as Tumour  
is: and therefore abused of Guydo and other, where they  
call all Tumours against nature, by  $\S$  name of Apostumes.

John Yates. Why sir, be not all tumours against nature?

Tho. Gale. No so, sooth, for then it had bene for him su-  
perfluous to haue added these wordes against nature. And  
Galen in his booke De tumoribus præter naturam, maketh  
thre kindes of Tumours. One that is Secundum na-  
turam, according to Nature: as the byanes, muscles, and  
other eminences of mans bodie. The second is called aboue  
nature: when as these fore-named parts are increased more  
than their naturall forme & figure, but yet in such sort,  $\S$  the  
parts



parts can do their offices. The laſt kinde of tumor is called Tumor againſt nature, becauſe they hurt the action of the part where it infeſteth.

John Yates. I doe now call to remembrance M. Doctor Cuninghame, who made alſo the ſame diuiſion of tumours, 1563. when he read the booke of Galen, of tumors againſt nature, to the Chirurgions of London in the hall, but I praye you let me learne what a tumor againſt nature is.

Tho. Gale. Out of the ſame booke of Galen you may gather this definition. A tumor againſt nature, is an augmentation or ſwelling, exceeding the naturall ſigure of y<sup>e</sup> ſame, and hurteth the action of the ſame. But Auiſen ſaith, that an Apoſtume (ſo, ſo calleth he a tumor) is a ſickeſſe compounded of three kind of infirmities, y<sup>e</sup> is to ſaie, of intemperatures, of ill conſtitution, & ſolutio of continuities: theſe wordes you ſhall finde in the firſt booke of his Canon.

John Yates. How many kinde of tumors are there?

John Field. Guido and other writers of his time, make three kindes of tumors: Apoſtoma, Puſtula, and Exitura. Apoſtoma he calleth a great tumor, in which y<sup>e</sup> matter (where of it ſpringeth) doth offend rather in quantitie than qualitie. Puſtula he doth make a leſſer tumor, in which the matter doth hurt by qualitie rather than quantitie. And this tumor the Arabians call Bothor. The third, which Guido nameth Exitura, is that which the Grecians doe properly call Apoſtoma, and the Latinists Abſceſſus.

Tho. Gale. But the Grecians do make differences of tumors, according to the ſubſtance whereof they do ſpring. So ſhall there be but two kindes of tumors generallie, that is to ſaie, Humoralis, ſpringing of humors, and Flatuoſus coming of windie ſpirites: this Guido ſeareth Apoſtoma ventofum.

John Yates. And how many differences is there of tumors which doe ſpring of humors?

Tho. Gale. Two, ſimple, and compound.

John Yates. How many ſimple be there?

John Field. There be alſo two, hot and colde.

John Yates. Why are theſe tumors called ſimple and com-

**Compound** : Tho. Gale. They are called simple, when as they spring of one sincere humour, without the mixture of other. And they are called compound, when the tumour commeth of two or more humours.

**John Yates.** Wherefore are the tumours called hot or colde?

**Thomas Gale.** They are called hot, because they spring of hot humours, and named colde by the like reason, because they are engendered of colde humours.

**John Yates.** How many hot tumours be there, and how many colde?

**John Field.** Diuerse and sundrie, as you shall perceiue by the processe of our talke, but the most famous are foure, springing of the foure humours simple, without the mixture of other of these two, &c.

**John Yates.** Which be they?

**John Field.** One commeth of blood, and is called Phlegmon, in English; Inflammation: an other springeth of choler, and is called Erysipelas, or S. Anthonies fire: and these be hot tumours. Another commeth of fleame, and is named Oedema: the fourth is engendered of melancholie, and hath to name Scirrhus. These two tumours are cold, all other simple tumours, are aptlie reduced to these foure.

**John Yates.** And what be the compound tumours?

**Tho. Gale.** They be diuerse, and varieth their names according to the mixture of humours, & the humour is mixed equallie, or inequallie, if they be mixed equallie, then the tumour is called Phlegmon & Erysipelas, but if they be inequallie mixed, then the tumour taketh name of the humour which surmounteth, as blood surmounting choler in a tumour: it is called Phlegmon Erysipelatodes, if fleame be mixed with blood in stead of choler, in forme as is aforesaid, then the tumour is named Phlegmon Oedematodes, and if blood mixed with melancholie surmount, it is called Phlegmon Scirrhodes. So in like case there are three Tumours, which take names of the humours mixed with Choler, Choler hauing the dominion, as when blood

bloud is with choler, they call the tumor Erysipelas Phlegmonosum. If fleame, Erysipelas Oedematolum; and if melancholike, then y<sup>e</sup> tumor hath to name Erysipelas scirrhosum, in like maner, fleame hauing dominion in the moisture with anie of the other thre humors, the tumor is first called Oedema; & then if choler be mixed with it, they adde this word Erysipelatosum: if bloud, the tumor is called Oedema Phlegmonosum, & if melancholie, the is it named Oedema scirrhosum. And to conclude, the like is to be said of melancholy, whē as anie of the other thre are mixed with, as Scirrhos Plegmonosus, Scirrhus Erysipelatosus, and Scirrhus Oedematosus: bloud, choler, or fleame, being vnequallie mixed with melancholy.

John Yates. What profit enueth to the Chirurgion by knowing the mixture of these humors, in tumors against nature?

John Field. Great profite, for by knowing the true mixture, he is taught thereafter accordingly to varie his medicines, for like as a simple tumor hath a simple cure, & is cured by his contrarie, so a compound tumor hath a compound cure, & is cured by his contrarie: as for the more plainer vnderstanding, if the tumor be mixed of fleame and melancholie equally, then shal you equallie mixe such medicines together, as are conuenientlie vsed in Oedema & Scirrhus, but if fleame & melancholie be ineallie mixed, and the greater portion is fleame, then in the composition you must in like manner put the greater portion of such medicines as you see in Oedema, & the lesser of such as are applied in Scirrhus, & this rule & precept is to be diligentlie obserued in all compound sicknesses, and for because the mixture of these tumors is so necessarie for a Chirurgion, as you may right wel perceiue by that which is now spoken: behold this table, which sheweth you all the mixture & names of tumors against nature, which for the great profite would be committed to memorie of him that will haue the methode of curing compound tumors against nature.

John Yates. You promised to shew the tumors which are referred to the foure principall simple tumors, Phlegmon, Erysipelas, Oedema, and Scirrhus.

John



John Field. And that we promised, we will performe, first uttering their names: and that being done, we will shew you their definitions. And we will begin with sanguine tumors, which are referred to Phlegmone, and then proceede to the rest. There are referred to Phlegmone, Phygethon, Bubo, Rhyma, Dothiene, Anthrax, Gargareon, Ranula, Abscessus, Gangrena, and Sphegoma. And John Yates. What is Phlegmone? Tho. Gale. Galea inneth Phlegmon (as we call it in English, an inflammation) is come of the flux of blood by 2 greater veines & arteries: into those which are lesser, & from them into those veines which are least of all (which because they are no greater then haires,) are called capillares. These veines being filled with this continuall flux of blood, part issueth out by the mouthes of the veines, & part by the cotes of the same, whereby the bodie spaces are filled, inflamed, distended and stretched out. And this tumor Galea calleth the inegal intemperature of the muscle. And note, that there are five kinds of inflammations. One which is called vera inflammatio, and this springeth of good naturall blood. The other is named Non vera, coming of ill and unnaturall blood, and this is common to all inflammations.

John Yates. What call you Phygethon? Tho. Gale. That which Celsius nameth Rarus, and this tumor is an inflammation of the glandular parts in the necke, armpits, and grine, which if they be indurated after this inflammation, there cometh tumors, which is named Chocerades, in latine Strumas, and Guido nameth them torofulas, and then this tumor is numbered among Regimaticke tumors. And is with vs usually called the Kings evil, because the Kings and Queenes of England (by a diuine & peculiar gift of God) be cure such as are molested with this infirmite, when as no arte of Chirurgerie can take place. And this differeth much from that sickness which the Latines name Regium morbum.

John Yates. Wherefore is it called in Greeke Choceras? John Field. Either of stones appearing by the Seas: or

etc of ruelle toples are strarved with this tumoz.  
**John Yates.** The swelling Bubo, Guido calleth it a fleg-  
 matike Apothume, wherefore I will let that passe untill we  
 come to the reasoning of the same.

**Tho. Gale.** You seeme to accuse vs of error or ignorance,  
 when we should number flegmatike Apothumes as you  
 call them, amongst sanguine tumours, as that I will thin  
 affirme bololie, that Guido either intendeth some other tu-  
 mor, which he so calleth, or else he repugneth manifestlie  
 with Galens authoritie, for Galen maketh Bubo a simple in-  
 flamation of the glandulous parts in that flanke.

**John Yates.** I doe not accuse you, but rather than you  
 Guido his minde, which thing that is doth not agree with  
 Galens, I maligne place, I also prefer Galen before Guido.  
 Wherefore I praye you proceede with the other inflammati-  
 ons, and shew me what the tumoz is which the Grekes call  
 Phyma.

**John Field.** This tumoz is a pock which will presently  
 as it were, come to suppuration, and it is called Phyma, by  
 Similitude it hath with pusses or mussyumps, springing out  
 of the earth. And there be two kindes of these tumors, one  
 consisting of heate, another of colde, but we in this place doe  
 number onelie the hot tumoz among inflamations.

**John Yates.** Dothienes followeth next in order.

**Tho. Gale.** Dothienes in Greke is called of Auicenna, Al-  
 demorena, of Celsus Furunculis, with vs a felone or Cats  
 paire, it is a sharpe swelling with inflammation, chancing in  
 the fingers with violence, and turneth to matter speedely, and  
 these often haue a feauer foyned with them.

**John Yates.** What is Anthrax?

**John Field.** That same which we call Carunculus, and is  
 an blcerous tumoz, springing of grosse melancholike blood  
 putrified. This tumoz followeth great inflamations, & there  
 are two kindes of Carbuncles, then one maye gentle and  
 benigne, the other pestilentiall & mortall, and the Carbu-  
 cle is both with pustles, and also without.

**John Yates.** Guido maketh difference betwixt Anthrax  
 and Carbunculus.

Tho

Tho. Gale. There is no difference at all but that Anthrax is a Greek word and Carbunculus a Latine. For Guydos difference, where he maketh Anthrax a malignant tumor, is no other thing than the essentiall, Carbuncle. But his derivation of the name is more ridiculous, where he saith y Anthrax is said of Antea, which he saith signifieth y hart, but in what tongue Antea is used for the heart, y he left unwritten: sure I say, it is neither Latine, Greke, nor any like word, nor like any thing that I have seen.

Io. Yates. Well, then I am herein satisfied touching the Carbuncle, what define you Gargareon to be?

John Field. Gargareon called in Latine Columella, is an inflammation of Vula, like as Paristhima or Tonille, are inflammations of the kirkels, situated in the beginning of the iawes, Guido and other of his sect call them Amigdalas.

John Yates. Ancurisma is next.

Tho. Gale. This tumor is no other thing than a dilatation, or rather relaxation of y arteries, whereby the blood & spirits are dispersed, making a soft tumor, which being pressed w y fingers, seemeth to vanish away, but y fingers taken again away, the tumor cometh to his wonted bignesse againe.

John Yates. If you doe in like sort set out what Gangrena and Sphacelus are, then you haue finished all such tumors as are referred to phlegmon.

John Field. Galen in his second booke which he wrote to his friend Glauco, defineth Gangrenam to be a mortification of the member unconfirmed, springing of great inflammations, And Sphacelus, called of diuerse writers Aschachilos, and of the Latinists Syderatio, is the exact and confirmed mortification of the member.

John Yates. Then by your wordes I gather, that both Gangrena and Sphacelus follow after great inflammations, & that they two differ in this, that Gangrena is as it were in growing and increasing ever more and more toward mortification of the member, & Sphacelus is when as Gangrena ceaseth to corrupt further the member, & that is now perfectlie mortified and dead, void of all naturall heate, blood, spirits, and feeling.

Tho.



**Tho. Gale.** You have rightly sayd, **John Yates.** When saying we have thus ended such sanguine tumours as are referred to Phlegmon, I pray you in the manner proceed in the cholerike tumours which are of like affinitie with Erysipelas.

**Tho. Gale.** We will so doe. Unto Erysipelas are referred Herpes, Phlyctenae, Epinyctides, and Itchy blisters. But first we will define what Erysipelas is, and then proceed to the rest.

**John Yates.** I thank you that you will accomplish my request and desire.

**John Field.** Erysipelas being of much affinitie to Phlegmon, called also of the latines, Igen, fieri, of vs, with fire, or Saint Anthones fire, is a kind of choler, arising about the skinne, nothing molesting the flesh. And is differeth frō Phlegmon, first that there is no pulsative colour in it, then that in the inflammation of blood, the colour is alwaies redde: in Erysipelas, the colour is yellowish pale. Last, that Phlegmon is an affeate of the muscles, and Erysipelas is onely of the skinne, and this is to be understood of Verum Erysipelas.

**John Yates.** Is there any more then one kinde of Erysipelas?

**Tho. Gale.** Have you forgotten that which was before rehearsed of compound tumours? And that there was Erysipelas, Phlegmonosum, Oedematosum, and Scirrhosum? These be comprehended in daed under the name of compound cholerike tumours or Erysipelas illegittimum.

**John Yates.** So then you make two kindes of Erysipelas verum, and also illegittimum.

**John Field.** It is right so. And that which is illegittimate or not right Erysipela is also divided into two kindes. The one coming of the greater and thicker lenere choler, and is named Erisipelas, with ulceration, and the other choler having other humours mixed with it, as I saide before.

**John Yates.** Seeing then that I understand what Erisipelas is, & how many kindes also there are of them: I pray you let me understand what Herpes is, for that followeth next in order.

John Freyde. Sharp is a kind of dangerous infection of the  
skinn which Hypocrits doth bring on of morning and  
narrowing the skinn, the Herpes in that which is called in  
latine Scaps, whereof commonly Herpes is first spoken. And  
there is the kind of Herpes, one called Herpes Eftiome-  
nus, so called, because it eateth up, devouring the other is  
named Genchros, in latine milianis, for that the nation was  
like Milie seeds.

John Yate. Guide doth speake of Eftiomenus, in this  
wise. Eftiomenus est morbus dissipatio membrorum propter  
hoc dicitur Eftiomenus, quasi hominis hostis, cum putrefacti-  
onem et dissolutionem attulerit.

Thos. Gale. Where Guydo saith, that Eftiomenus is the  
death and dissipation of the members, and for that is called  
Eftiomenus, as who should say, the enemy of man, standing  
with putrefaction & dissolution. I doe little in my indigni-  
tise alone here, first that he leaveth the writers of Physicke,  
Hippocrates, Galenus, Paulus, and followeth the sense of some  
learned and authorities wanteth that he will somewhat in-  
terprete that tongue in which he had small knowledge.  
Roderbergh be sure heade among the Grecians, that the  
tumour Eftiomenus, was confounded with Spumelus, which  
indeed is the mortification of the member. And againe,  
where learned he the derivation of Eftiomenus, to be homi-  
nis hostis. But this may yet seeme tolerable in Guido, when  
that Avicen giving occasion of error to other, comprehen-  
ding both kindes of Herpes, under the name of Foronica,  
doth also most absurdly comprehend myrmecia, (that is to  
say, Foronice, and is a kinde of wasps) under the name of  
Herpes, and so confoundeth both together. But this that suf-  
fices touching Herpes.

John Yate. When let me learne what Phlyctene are.

John Field. Acius in his fifth booke and Aris. Chapter,  
saith, that there are pustules coming of sharpe chollerylike  
to the blisters which cometh of scalding waters & bring  
no beehmet dolour or paine, which being broke, there flow-  
eth out a yellowish humour continuing unto the third, or  
sometimes the fourth day.

Thon

50 John Yates. Now know we that some of pustules differ from those which are called Epinictis. *Tho Gale.* There much. For Epinictis is the most ill and malignant kind of pustules, he frowns, and leavy in colour, with great and vehement inflammation about the, and these being opened, there is found a stony excrement in them. This tumour is never greater then a bean, and is called Epinictis, because commonly they lying in y night season, and then most molesteth the patient. The Arabians call this tumour effare, or saie, and Plinie nameth it pustula lyuens.

John Yates. There it remaineth these tumours which the Grecians doe call Hidra, and the latines Sudamina.

John Field. Auicen nameth them planta noctis, and Rasis, Alhalaphum. These are certaine cholericke pustles, consisting of much and abundant swee, which through the sharpnes thereof, doe exasperate and bleed the skine: and thus have you learned the famous and notable cholericke tumours, wherefore we will now convert our talke to such as are phlegmaticke.

John Yates. You doe meane such as are referred to Oedema, doe you not?

Tho. Gale. Yes verely, & they be called by their names, Atheroma, Scatoma, Meliceris, Hidroccele, Ascites, Leuco-phlegmatia, Chirax, Bronchocele, and Hydrocephalon: and as touching Oedema, it is thus defined.

Oedema, is a tumour soft, loose, and without colour or griefe, springing of sicume, and it is divided into Oedema, that is a disease, and into that which is Symptoma, or accident. Of this Galen maketh mention in the sixth booke, fifth Chap. of his Therapeutike methode. The true Oedema, is y which foolishly the barbarous Chirurgions call Vndimia.

John Yates. I remember Guydo nameth it both Vndimia, and also Ydemia, and Cima, but let that passe. I pray you set out those three famous apostumes signatike, which you call Atheroma, Scatoma, and Meliceris.

John Field. This apostume called in latine Abscessis, and of Haliabbas, Sclaa, of Auicen, Nodi, have divers names after



after that thing which is in more of them contained) from  
 John Acherome. It is a kind of tumour of the necke, and  
 parts, and without paine and danger, consisting in the accu-  
 mulation of a lying humour, and lyke a pultesse in substance.  
 And sometime there is found in it haire, Charles the booke,  
 and hard things as they were stones. And Stracoms that is  
 to say, Adipinus nodus, is a little kind of a tumour, in an  
 augmentation of fatnesse against nature, gathered in some  
 part of the body. Meliceris or Nodus mellis, is a round tu-  
 mour, hard, & boyde of griefe, in which the nervous matter  
 doe continue an humour lyke in substance to Hooley. And  
 all these three effectes are first smal and little, and so by lit-  
 tle and little, augment and waxe, and are contained with  
 in their severall filmes or coats.

John Yates. What is this you Hydrocele to be?

Tho. Gale. Hydrocele is that which in Latine is called  
 Hernia aquosa or Humoralis, and is a tumour consisting of  
 a watry humour gathered in the purse of the testicle.

John Yates. And what is Ascites?

John Field. It is one kind of the dropsie, and this tu-  
 mour is, when that a serous humour is contained betwixt  
 the inward coats of abdomen and the intestines. This coat  
 is called Peritonæum.

John Yates. Leucophlegmatia followeth next.

John Field. It is also named Anasarca and hypostarca,  
 and is an inequall tumour going through the whole bodie;  
 this may in my conceit be aptly termed an universall Oe-  
 dema, of all the bodie: as touching Cherades, we have spo-  
 ken among Sanguine tumours.

John Yates. There yet remaineth two tumours Bro-  
 chocele, and hydrocephalon.

Tho. Gale. Brochocele is a tumour in the throat called  
 also Bocium, and it is a great and noisie swelling of the  
 necke betwixt the Skina and Aspera arteria, in which is  
 contained sometime fleshe, sometime lyke Honey, fatnesse,  
 or a pultesse, & sometime saith Celsus, there are found haire  
 mixed in bones. Also Hydrocephalus is a watry tumour in-  
 creased for a great part in the head of a child, or else it comes of  
 grolle



to that which the later writers of the Arabians name Lep-  
 ra, and some Lixuris Scintilla: It taketh name of the  
 beast called an Elephant, because of the greatnesse of the af-  
 fect, length, and roughnesse of the skinne. It is also named  
 Elefantia, because of the wile & rugose tumour of the skin.  
 This disease is terrible, contagious, and in the number of  
 those infirmities pleræ, which are contagious.

Thomas Gale. And when this tumour is yet in the be-  
 ginning. It is not called Elefantia, but Satyriasis, ta-  
 king that appellation of the Satyres, whom the Poets des-  
 cribed to be deformed and monstrous.

John Yates. Saying that Elefantia is not Lepra Gre-  
 corum, I praye you shew me their difference.

John Field. Galen in his booke of Definitions, worth be-  
 lieve it in this sort. Lepra is mutation of the skinne into an  
 habite against nature, with asperitie and itching, colour &  
 scales, and occupieth diuerse parts of the bodie, and there is  
 no small distance betwixt Lepra and Scabies, both being  
 motions of the skin, both springing of melancholicke yales, &  
 they differ in figure, for Lepra occupieth & becometh vnc-  
 like the skinne in round figure, and taketh shales like fish:  
 & Scabies called also Pfora, infecteth rather the upper part  
 of the skinne, and is diuerse figured.

John Yates. Enchymoma followeth next, and Melasma,  
 Tho. Gale. Galen in his booke De tumoribus præter na-  
 turam. 10. Chap. sixth, that they are tumours happening to  
 olde men through the confusion of the veines, whereby the  
 blood flowes out of the coats of the veines: Of these some  
 be blacke, some betwixt blacke and red in colour, and they  
 come of small and light occasions.

John Yates. The next tumours are varices, in Greeke cal-  
 led Cirrhus, which I take to be the swelling of the veines  
 through too great flux of grosse and melancholicke blood. And  
 I haue most commonly seene them in the shanks & calves.

John Field. And those be the proper places for this tu-  
 mor: like as the two tumours next following, Sarcocoele and  
 Polypus, haue their peculiar parts wher they doe first, as  
 Sarcocoele is a fleshy tumour growing in the testace, and is



called in Latine *Nervus carnosus* the latter is a fleshy  
branch springing in the vessels, and latter the operation  
of the same, and it taketh name of the fleshy called *Poliper*  
for like as that fish hath many legs, so also both this tumor  
many roots whereby it cleaveth and groweth to the vessel.

The Gale. It is right so, and *Verruca* which is next in  
order, is a certaine tumor appearing in the uppermost part  
of the skinne, it is named with be a wart, of this sort be  
*Acrochordones*, & *Myrmecia*. *Acrochordon* is a round wart  
hanging as it were by a thread, and thereof taketh name,  
and is called in Latine *Verruca penilis*, & *Myrmecia* is also  
a kinde of warts which groweth deeper and is hard and fir-  
ed to the skinne, narrow above, & broad beneath, prouoking  
dolor & paine, and is blacke in colour. And thus have wee  
finished and declared unto you al the notable tumors which  
are referred to the foure simple, *Phlegmone*, *Erysipelas*, *Oe-  
dema*, and *Scirrhus*.

John Yates. Yet among all these I heare you make no  
mention of *Morbus*, which I thinke is to be numbred a-  
mong tumors against nature.

John Field. I doe not well understand your meaning,  
for many a tumor is called *Morbus*, for *Morbus* is a Latine  
word, and all sickness and infirmities be called *Morbi*.

John Yates. Yea, but I meane that scab which the comon  
Chirurgeons calleth the *Morbus*, and the *Morbus* ranke, and  
the better learned nameth it, *Morbus Gallici*.

The Gale. It is a great thing to be trained up in igno-  
rance or barbarous doctrine at the first, for ever after doe  
what you can, they will have some fault thereof, as right ex-  
cellently the Poet *Horatius* said,

*Quo semel est imbuta recens seruit odore,*  
*Testa diu, &c.*

Which is as much in effect to be offered in our usuall  
language, as

With what thou first fild thy vessel,  
of the same long time it will smell.

And this may right well be verified with those of our  
time, one rinde of *Scirrhus* is called it, the *Morbus*, and a num-  
ber

for following him in his follie, & another because he would  
 seeme cunninger than the rest, to say as much ignorant as  
 meth it Morbus Gallici, breaking the olde Physicians head,  
 and yet will not or cannot give him a plaister. But if you  
 will use that usuall name, you might have named it Mor-  
 bus Gallicus, or Lues venerea, and so have observed congrui-  
 tie in speaking, but as touching the names of that contagi-  
 ous infirmittie, which is usuallie named Morbus Gallicus: in  
 my opinio they all do nothing expresse the nature of the sicknes:  
 & like as the authoys which wrote of it, varieth in the names,  
 so doe they both in knowing the disease, and cure of the same.

John Yates. What then shall I properly call it?

John Field. The same that Spasser Doctor Cuninghame  
 hath invented a similitudine cum Chameleonte belliola.  
 What is, he calleth it Chameleontialis. The reasons hereof,  
 the definition, cause, signes, prognostications, & new kind of  
 curation, he hath expresse in a booke thereof written, which  
 I trust he will hereafter publish.

John Yates. And doth he not number Chameleontialis a-  
 mong tumors against nature?

Tho. Gale. Nothing lesse, for he accomitteth all those tumors,  
 swelling, knots, blcers, and such like, infesting the bodie of  
 man, but as accidents, and no part of the infirmittie, neither  
 laboureth he so much in these, as in expelling the sicknesse  
 which bringeth forth these accidents, for these are to be remo-  
 ved without difficultie or great trouble.

John Yates. I iudge his new invented waie of curation  
 to be extreme & dangerous to the patient, for both the fumes,  
 bngnents, and straight order of diet, with the towe, are wel  
 knowen to be dangerous, and yet many times doth not  
 that which they promise, but yet if his waie be perfect, it is  
 the more to be liked, and he worthy of praise.

John Field. His waie is bothe of danger, easie to the pa-  
 tient, exact also and perfect.

John Yates. Asking then that Chameleontialis, but  
 gartie termed Morbus Gallicus, is not to be numbered a-  
 mong tumors against nature? I wate you proceed to the other  
 part of your question, for I remember you said there were

three kinds of tumours, the first you called Humoral, because it hath spring of humours; the second Venous, for that it is engendered of spirits; the third you tearme Tumour Varius, because they have mixed causes, sometime of humours, and spirits mixed, and sometime of other causes. Therefore I praye you now let me learne how many tumours are referred to venous tumours.

Tho. Gale. The most famous are three, Tympanites and Priapismus.

John Yates. What is Tympanites?

Tho. Gale. That which Hippocrates nameth a hyle droppie, and is a tumour springing of windie spirits, collected betwixt Peritonaeum and the intestines. And if you linte the bodie of the patient bored with this tumour, it will give forth a sound like to the Tympanie, and henceof it first take name.

John Yates. And what tumour is that which is called Priapismus?

John Field. Priapismus is a tumour of the yard, whereby it is distended out in length and breadth through vaporous spirits, filling the nerves called Nervus cavernosus constitutus cohaerentiam.

John Yates. There remaineth to speake of those tumours which you tearme Tumores variis.

Thomas Gale. There nothing as you say, and these be the notablest of those tumours, Vitiligo, Exanthemata, Parotides, Mentagra, Epiplocele, Enteroccele, Enteropiplocele, Bubonoccele, Exomphalos, Arthritis, Podagra, Chiragra.

John Yates. What call you Vitiligo?

John Field. If you will generallie take it, it signifieth a foulness and graining of the skinn, coming of the ill disposition of the part, which cannot make good assimilation of the nourishment, & there be two kinds of this tumour, the one named in Greeke Leuce, of the Arabians Albas, and in Latine Vitiligo alba, which is a mutation of the skin into more whiteness. The other is named Alphas, & of Aescen Morpheus, & we usuallie call it by Morpheus, & there are three kinds of Morpheus, the one white called of Celsus Leuca

Alphas



**A**phoe, the other blacke, & be commeth it Mela, and Aphoe  
is deriued of this Greke worde Aphron, which signifieth  
to alter by change, and so both the wordes to alter & change  
the colour of the skinn, and so

**J**ohn Yates. And what tumors are those which I haue  
doe call Ecthymata? They are those which cometh  
to Thomas Gile. They be pustules and tumors breaking  
out of the skinn, springing with them fevers, and many  
other accidents. And there are two sorts of them, one higher  
springing of thin and cholerike blood, the other broader, &  
cometh of melancholike and grosse blood. The first kind  
we call the small pox, in Latine Morbilli, the other the  
spockles, and Varole in Latine.

**J**ohn Yates. Parotides followeth next, what are those?  
John Field. Parotides be inflammations which happen to  
the kinnels that are behind the eares, and they spring some-  
time of thicke blood, sometime of flane, sometime of chy-  
lar, and sometime of melancholie. And herein note the pro-  
vidence of nature, for she hath made the face and hole parts  
called kinnels, to be as a furnace for the noble parts. As  
the kinnels behind the eares serve to the braine. Wher  
the arme is, serving to the spirital members, and the kinnels  
in the groin both receive & superfluities that cometh  
from the liver, when as it doth exuberate and purge it selfe,  
and this is most manifest in peccentall constitutions, in  
which these noble members thrust and expell the venim to  
their purging places.

**J**ohn Yates. As for Mentagra, you need not to speake of,  
for I know right well, it is no other thing than Morbis  
Galicus, or Chamaeleontias, as the poore bearing the name  
of Mentagra doe call it.

**T**ho. Gale. And yet both you & the author of that booke do  
herein intell the cusion, as farre as you make your selfe of  
this. For this tumor which Plinius calleth Mentagra & Im-  
petigo, in Greke Leucina; & among the Italians  
in the time of Tibals, and is a deformitie of the skinn,  
beginning for the most part at the chin, and soth spredde  
tyme into loope, and cast off scales like fish. And Galen

is called in the Greek and Latin *Sarcoloma*. And  
*Impetigo* will turn into *Leprosy*. Therefore what differ-  
 ence is betwixt *Melanagra* and *Chamaeleontia*, it is easily  
 conceived, the one having *Causam* roots, as I may term  
 it, and the other *Manifestam*.

Io. Yates. And what Iudge you *Epiplocele* to be?  
 John Field. I will not only speake of that, but also of  
 the other kind of *Hernia*, which followeth next. And first  
 you must note that *Epiplocele* is a *Grike* word, compound  
 of *Epiploon*, which the Latins call *Omentum*, we name  
 it the *Gault*, and *Cele*, which signifies *Humer*, as *Hernia*,  
 so that *Epiplocele* is a tumor coming when an *Omentum*  
 falleth into the purse of the testicles. And by the like reason  
*Enteroccele* taketh name, when the intestines fall into  
 the same place. And *Enteropiplocele* followeth, when  
 as both *Omentum* and the intestines fall in *Scrotum*, as  
 purse of the testicles. Furthermore *Bubonoccele* is a tumor  
 called in Latine *Inguinis*, raines, and happeneth when an  
*Peritonium* is ruptured up to the side of the flanks. *Exom-*  
*phalos* is a tumor pertaining to the overthwart muscles  
 of the Abdomen, which being relaxed there followeth a standing  
 up eminentie of the navel. And of *gallin*, etc. etc.  
 This Good brother Yates both the number and conceits  
 of the names of these kinds of *Hernia*, for that he hath a pecu-  
 liar way of sorting some of the speciallities of *Enteroccele*, as  
 he can intelligne as Guido teacheth, whereby he will no  
 longer stand in uttering the differences of the, but proceeds  
 as *Avicenna*, *Podagra*, *Chiragra*. For I thinke I dare well  
 beleeve the student to declare that which yet remaineth, there-  
 fore touching *Arthritidis*, you shall note and observe that it  
 is a tumor coming of the flux of humors into the joints,  
 is named in Latine *Mothbuxicularis*. And so is this tu-  
 mor common to all the members of the body, except it be the  
 hands and the feet. *Arthritidis* (which remaineth as a tumor)  
 John Field. Yes, for if this cure happeneth in the hands,  
 it is named *Chiragra*, and if in the feet, then it is called  
*podagra* of the place. *Podagra* isy Dom sht cor pained  
 John Yates. Whose definition of the jointen he is a little  
 painful,

painfull have they no other cause but the fluxe of humours  
The Galea the fluxe of humours is but the interne and  
freedent cause, which commeth of the patient's nature, but it is no  
part of our minde, to set out either the causes, signes, or  
ration of tumors, being that we have done that in our booke  
of the methodicall cure of tumors against nature.

John Yates. Saying that you have not spoken of all the  
notable and famous tumors against nature. I pray you  
turne your talks to wounds, which Aures and those that  
follow him calleth Plaga.

John Field. Before we enter further herein, to let out  
the differences of wounds, it is convenient to know what a  
wound is. And the most part of writers agree that a wound  
is the solution of continuitie more in the parts of the body  
without putrefaction of matter. The Galea, for when a putrefaction of matter hath  
followed, then it leaveth the name of a wound, and is called  
an ulcer.

John Yates. And may a wound degenerate into an ul-  
cer.

Thomas Gale. Yes, I say so, and so hath most partes of  
wounds, especially if they be great, and in such partes as  
may not be cured with balmes.

John Yates. And how many differences be there of  
wounds.

John Field. I say, but the three, and principal, and that  
are necessary, are numbered to be three, and are, first  
they are whereof the differences spring.

John Yates. Doe you so.

Tho. Gale. Guido and other famous writers of his time  
taketh the difference of wounds of three things. The first  
is taken of the nature of the parts, in which the wound is  
made. The second difference springeth of the substance or  
effence of the solution of continuitie. The third difference  
springeth of the difference of the division, or solution of con-  
tinuities.

John Yates. And how are the wounds called. I pray  
differences commeth of the nature of the parts in which the





John Yates. Where there be first differences of wounds taken of the nature of the part, there in the sequel shall be the difference in the instrumentall part, as for the former stands the difference of wounds taken of the essence of the solution of continuities.

John Field. Where is a simple difference, for either it is a simple wound, or else it is a compound wound.

John Yates. What is a simple wound?

John Field. A simple wound is solution of continuities, not being made being of accidents or other affects with it complicated and joined.

John Yates. And what is a compound wound?

John Field. The contrary to a simple wound, for it is solution of continuities, having one or more affects and accidents complicated and joined with it.

John Yates. You have now showed two kinds of wounds, the one taken of the nature of the wounded part, the other of the essence of solution of continuities, there yet remaineth to be said, such as touching of the proper difference of solution of continuities.

John Field. Where way to as you say, and the proper differences are taken of two things. What is to wit, of the quantitie and of the figure.

John Yates. And how be the wounds named, which have their difference of quantitie.

John Field. They are called by these names, a great or little wound, a long or short wound, a broad or narrow wound, a deepe or shallow wound, and an equal, or else an unequal wound.

John Yates. And how be those wounds named, which are taken of the figure of the wound?

John Field. They be thus termed, a right wound, an oblique or crooked wound, and a rent wound. Where are besides these three principall differences of wounds, other wounds, although they be not proper, as a wound disrupted or broken, a wound which is cut, a wound partly broken, partly cut, also a wound at the beginning, middle, or end of a member, they have, but these differences all are





John Yates. That were a point of extreme audacity and  
 unwisdom: And yet in affirming to nothing at all, and  
 saying, Tho. Gale. Well, then this last will be a supposition of the  
 difference of wounds; yet methinks you both in a point of your  
 wisdom, and when also which must be first, and which next.

John Yates. No man can that. And therefore saying  
 that the blade passes over the difference of them, is fol-  
 loweth next in order, that we do proceed to bleed.

John Field. And if you may the better understand those  
 things which hereafter shall follow, it is requisite to learn  
 first what an ulcer is.

John Yates. When I pray you define what an ulcer is.

John Field. An ulcer is defined to be the solution of unitie  
 in the fleshie partes, having some disposition, letting e-  
 binding the agglutination of the same, of which cometh  
 matter, two other by the filthinesse.

Tho. Gale. You may also briefly define it, following  
 Avicenna in this manner. An ulcer is the solution of contin-  
 uitie, made in the flesh containing matter and pus.

John Yates. And whence are ulcers engendered?

Tho. Gale. They spring of wounds ill healed, of pustules  
 and apostumes, coming to ulceration.

John Yates. And doth ulcers spring of wounds?

John Field. They doe. For when as a wound doth con-  
 taine matter, it is no more called a wound, but an ulcer.

John Yates. How many kinds of ulcers be there?

Tho. Gale. There be two kinds, a simple ulcer, and a  
 compound ulcer.

John Yates. And what is a simple ulcer?

Tho. Gale. A simple ulcer is a solution of unitie,  
 with matter, void of accident, complicated with other  
 affections. And here you must note according to our suppo-  
 sition, that when I say a simple ulcer, I mean not one sin-  
 ple infirmitie by itselfe; for I am not ignorant that ene-  
 ry ulcer doth consist of intemperance, solution of conti-  
 nuitie, sometimes also of ill composition. And therefore when  
 I speak of a simple ulcer, I mean that which is opposed  
 contrary to a ulcer, which is complicated with many affections.

John

On John Yates. When by your answers I gather that a 15. pound blister is solution of continuittie in the flesh, having matter, & since it is with it loyned. Now I pray you let me understande what many differences there be of blisters.

John Field. There are notable blisters are blaine numbers

John Field. Their names in Latine are these, Vlcus saniosum, Vlcus cancrum, Vlcus carnosum, putridum, & cetera. Now we must by circumlocution, make them plaine unto you, by the select of apte wordes in our language.

John Yates. And can these haue no other names.

John Yates. How many wayes.

Tho. Gale. First principall wayes.

John Yates. Which are they.

Tho. Gale. First an Ulcer may be named of humours,

John Yates. Which way name you blisters of humours.

John Field. Those which spring of blood, and called sanguine, of choler, cholerike, of deuine degumative, and of melancholie, melanchollicke.

John Yates. And how are they called which come of sanies of matter.

Tho. Gale. You must note that blisters be named of sanies, foure sundry wayes.

John Yates. How so.

Tho. Gale. Because sanies is called by foure names.

John Yates. Which be they.

Tho. Gale. Sanies, Pus, Sordides, and Violentia, & hereof cometh that of Sanies, the latter is named a sanious blister, of Pus a purulent blister, of Sordides, a stibie blister, and of Violentia the blister is named a virulent blister.

John Yates. Before you proceed further herein, I pray you remember what Sanies is matter.

John Field. Sanies is a north word corrupte by the time, that you are ignorant of the note, that there is a good kind of Sanies, good and salubrious, and also an ill and noxious.

John

John Yates. What call you this matter or sanies  
John Field. It is called sanies, when as it is white in colour, light and equall, heate of kincke and boorish smell, and is also digested.

John Yates. And what define you ill matter or sanies

John Field. It is that which is contrary to the good. A corrupt nourishment in which the substance is unequal, digested, ill smelling, and diversly discoloured.

John Yates. What is that you call Pus, of which the Ulcer is named purulent.

The Gale. It is ill matter or sanies, consisting of nourishment and superfluities of the flesh member, which tendeth to corruption, through the naturall heate altered into an unnaturall state.

John Yates. I pray you let me learne what Virus is.

The Gale. It is subtle and thinnie sharpe sanies, ingendred of thinnie watry humours, which through the abundance, the heate can not digest and overcome.

John Yates. Where yet remaineth to speak of that kinde of sanies which you called soridities.

John Field. It is grosse matter ingendred of the grosse-nesse of humours.

John Yates. Tell now returns againe to the names and appellations of vlcers. Now I pray you are vlcers called after accidents, which the Grekes call Symptomata.

The Gale. It is called of corrosion a corroding vlcer in Greke Phagedenium, of putrefaction vlcus putridum, of dolor and paine, it is called vlcus dolorosum.

John Yates. And how is the vlcer called of sickness.

John Field. It is called in this manner of Cancer, cancerous vlcer, so in like manner of Fistula the vlcer is called Fistulosum or vlcer fistulace.

John Yates. Being you are come to that falke of a fistula, in knowledge of which, and also exact curation, you are not a little commended: I pray you define what a fistula is.

John Field. It is an hollow and deepe vlcer, having a straight quicke, and the hollownesse of the same is hard, out of which many times floweth matter, and the fistula both

many



many demonstrations according to the place in which it is, for when it happeneth only in the flesh, it is called fistula carnosa, in the veins venosa, in the arteries, arteriosa, in the nerves of sinewes, nervosa, in the cartilages cartilaginosa, in the muscles musciosa, in the bones ossa, and also of seares and blisters when it putteth forth, it is named fistula ichthymosa, in short it is called fistula.

John Yates. I will now turne we againe to the last part of the division, and shew how ulcers are called by similitude.

Tho. Gale. I will. The Ante of Buthere (in latine Formica) creepeth and maketh holes: and of like sort, the Ulcer which creepeth and maketh many holes in mans body, is hereof termed Formicosum vlcus: and also of the hollow canies of the ground called cauea, the hollow ulcer is named caueosum: and so in like sort of other things, for of the similitude the ulcer taketh name.

John Yates. I heare you not make any mention of those famous and notable ulcers called Tephrea and Chironia vlcera, neither can they be comprehended vnder any of the five principall kindes of ulcers.

Tho. Gale. Yes forsooth, but Galen whom I follow, accepteth those differences of Tephrea and Chironia vlcera, in poisonous, and he comprehendeth them vnder the name of Phagedenicon, or Corrodens vlcus. Therefore we may aptly place them among corrodng ulcers, which is the first kinde of the notable ulcers, before rehearsed.

John Yates. And be all these kindes of ulcers of like facility in curing?

John Field. No verely, for there be some which are easily cured, and other also which will hardly, or not without great difficultie, receive curation.

John Yates. Which be those that will easily be cured?

John Field. Such ulcers as happen in persons of good complexion, whose bodies are nourished w<sup>th</sup> good blood, & have no abundance of superfluous moisture: for Aesculap faith, that in bodies of the best complexion, the ulcers are more speedily healed.

John

**John Yates.** Which blcers are hard to be cured.  
**Tho. Gale.** All those blcers which followeth after any  
sicknesse.

**John Yates.** Wherefore should those blcers be so rebel-  
lions and hard to receive curation?

**Tho. Gale.** Because nature doth exonerate & unburthen  
hir selfe of the dregges and reliques of all and vicious hu-  
mours.

**John Yates.** Are there no other blcers but these that be  
hard to cure?

**John Field.** Yes, and such be all blcers which happen to  
persons having accidentally their bodies moist or drye.

**John Yates.** Give me an example of those bodies which  
accidentally are moist.

**John Field.** You neede no other exaple to set before your  
eyes, then persons having droples, and women with child,  
where blcers happen in such bodies, they will not cicatrize  
because of abundance of superfluous moisture.

**John Yates.** I thinke it so. But if that the great unposs-  
nesse, do let y<sup>e</sup> blcer to be cured, then in bodies that be drye, it  
followeth y<sup>e</sup> blcers to be easily healed. How hapneth it, ther-  
fore y<sup>e</sup> you affirm blcers in drye bodies to be hard of curatio?

**John Field.** And yet in these my words, I doe not comit  
any error. For I speake not simply of all drye bodies, but of  
those that were drye accidentally, such be the bodies of them  
that haue hecticke fevers, & marasmus. In these the blcers,  
for defect of good blood, cannot consolidate, but with great  
difficultie.

**Tho. Gale.** And you haue also the lyke example in olde  
men whose blcers will hardly receive cure for the defecte of  
good blood, they being not able, for the imbecillitie of natu-  
rall heate, to concoct and digest their meate.

**John Yates.** When by your wordes I doe finde, that in  
three sortes of people, the blcers wil not without difficultie  
be cured, y<sup>e</sup> is to saye, in those where blcers followeth great  
sicknesse, & in bodies which are accidentally moist, & those al-  
so which are likewise drye. Now before we finish our talk of  
blcers, I would learne of you what putrefactio, corrosion, &

**Digestion is,** the knowledge of that is most valuable in  
Bleeds.

**John Fields.** It is so, and note that, putrifaction according  
to our authors Chirurgians, is defined to be a transmuta-  
tion of the whole substance of the body or part of the same,  
springing of sickness and unnatural heats: which being  
contrary and deadly enemies, to naturall heats, both corrupt  
and destroy the same.

**Tho. Gale.** And corruption is a consumption of the body  
which cometh through sharpe humours, which resisteth,  
consumeth, and oyleth, the substance of the nourished part,  
which being resolved the substance of the body is dissolu-  
ted and bleached.

**John Yates.** These two, putrifaction and corruption, se-  
meth to be as you say, although for want of naturall phi-  
losophie, I cannot better say, but it becometh the learner  
sleeper to beleue and credit the teacher: but what is di-  
gestion?

**John Fields.** Digestion is taken in two waies, one way  
it is taken for an orderly dissolution of the work of na-  
turall heats made for the augmentation and nourishment of  
the parts. The other way it is a dissolution of natural heat  
ordained to the preparation of humours, whereby the hu-  
mours are made redie to be thrust out by the vertue expul-  
sive, and this last way is that which the Chirurgion ought  
to consider.

**John Yates.** Now you haue thus finished tumours a-  
gainst nature, wounds, and vicers, it is time to intreate of  
fractures. Wherefore I pray you let me understand what  
a fracture is.

**Tho. Gale.** A fracture is called in Greke Catagma, and  
is solution of continuities, made in the bone. But the later  
Grecians as Aecius and Paulus, namelly a fracture, the dissolu-  
tion of the bone, or its rupturing or breaking of the same, or  
any solution of the bone, violently coming of any out-  
ward cause.

**John Fields.** Yet Guido de Caulis, and other of his kind,  
define a fracture to be solution of continuities of the bone,



not coming of evill cause, but growe when as it cometh  
with of mutisme, and this difference, he putteth, for it saith  
be, a bone broken and a bone cut, may be knowen a sunder.  
For a bone cut howe is not to be properly named a fracture,  
but rather a wound in the bone. Iohn Yates. There is no great  
dissimilitude among the, neither let us be curious about wordes, so the thing intended  
of us intreats may be evident and plaine. Wherefore I  
pray you heare me, notwithstanding many kindes there be of  
Fractures. I say not that there be two kindes of fractures, a simple  
fracture, and a compound. Iohn Yates. What is a simple fracture?  
Iohn Field. A simple fracture is solution or division of a bone  
made in the bone without any other affect joined with it.  
Iohn Yates. What is a compound fracture?

Iohn Field. It is also a solution of a bone made in the  
bone, having one or more affects to it connected and joyn-  
ed. Iohn Yates. There many differences, as there is of Frac-  
tures. Iohn Field. There many differences, as there is of Frac-  
tures. Iohn Yates. You must note that like as there be sim-  
ple and compound fractures, so in like manner there be  
differences of fractures both simple and compound. Where-  
fore let me knowe of which fracture you would knowe the  
difference.

Iohn Yates. I would right gladly understand all the  
differences, although for want of knowledge I cannot or-  
derly demand of you. Wherefore I pray you first to begin  
with the differences of simple fractures, and then to the  
compound.

Thomas Gale. That we will gladly, and first let us  
honour you to consider that there be many and diverse  
kindes of simple fractures. For some fractures are over-  
thwart, and divides the bone in sunder, and they are they,  
Cayledon, Raphanidon, Sicidon, that is to say, the bones  
are broken like unto the similitude of stalkes, of beeches,  
Raddish, and Cucumbers. Where now heares these si-  
militudes,

kinds of fractures in the bone long & short, called by the  
 Scholasticke, *fractura simplex* & *fractura composita*.  
 When the bone is broken into many small and loose  
 pieces, and the matter is plentiful, it is called *fractura*  
 differences of simple fractures) in several a fracture is  
 called *fractura simplex* & *fractura composita*.  
 John Field. The chief and notable being accompanied  
 with swelling and acutement, it is these: 1. a fracture with a  
 wound, a fracture having with him loyned Gangrene, 2.  
 a fracture with inflammation, 3. a fracture with colour and  
 paine, a fracture with confusion, a fracture with Callus to  
 much increased and growen, 4. a fracture with too much ex-  
 tention, 5. also baronies of Callus, 6. a fracture with superfluous  
 matter of Callus, and such like.

John Yates, who there no other kinds of fractures besides  
 these two simple and compound, and also Galen who  
 Galen. Galen. There be no other proper names of fractures  
 fite it must be either simple or compound, and Galen  
 says but two kinds of simple fractures, a fracture made se-  
 cundum longitudinem, and a fracture made per transversum.  
 But Cornelius Celsus makes the third difference to it, his  
 words are these, lib. 8. cap. 2. *Quidam modo rectam, et hanc  
 in longitudinem tendentem, modum hanc per transversum, inter-  
 obliquam, &c.* which is as much to say, as every bone  
 is fractured, either in length, as wood cleaven, either it is  
 broken overthwart, and sometimes it is fractured, oblique, or  
 crooked. John Yates. Although many other kinds, no fracture  
 in Crania, a fracture in the thigh, a fracture in the neck, a  
 fracture of the spine of the backe, a fracture of the scull, &  
 of other bones. John Field. The only right is as you say, but in my opin-  
 ion there be no differences of fractures, but rather notes the  
 parts affected. John Yates. It is most manifest, and yet for we have  
 spoken of the Enchondion of Chirurgery, the more large, where  
 we set out the differences of fractures, the great manner  
 of

of curing them. But because you may the surer heare these  
differences of fractures surer in memorie, behold this ta-  
ble which setteth out all the divisions of them, and if you  
take pains to commit them to memorie, then you have in  
effect the whole Theorike of solution of continuitie made in  
the harder parts of mans bodie.

John Yates. I thanke you Sir. I will not omit the great  
profit which will follow for the patient paine, for the gaine  
will remaine when as the paine shall be quite forgotten.  
Now for the time of the day which yet remaineth finish in-  
structions, and what else you thinke convenient for the in-  
struction of a Chirurgion.

John Field. I will accomplish your request, and first  
note that a luxation or dislocation (which the Grecians also  
call Enarthema) is a displacing of the joint, and moving of  
it out of his natural seat into another place unaccustomed,  
whereby the voluntarie motion of the same is hindered.

Tho. Gale. And this luxation is either perfect, as when the  
bones are quite divided and put asunder, or else it is an im-  
perfect luxation when the joint is but a little pressed, and  
not all together dislocated, this the Grecians call Parar-  
thema.

John Yates. Some many kindes of luxations are  
there.

John Field. There be two kindes of luxations, a simple  
luxation, with which there is no difference touched, and a  
compound luxation, having one or more effects to it con-  
nected and complicated.

John Yates. What effects be those which are joyned with  
compound luxations, or rather to speake properly, what ef-  
fects do make the luxation compound.

Tho. Gale. The most common are these, a luxation with  
a fracture, a luxation with Phlegmon, a luxation with a  
mound, a luxation with colour, a luxation with hardness,  
a luxation with fire, and so in like sort you may number  
other effects, as they are with the luxation connected.

John Yates. You have now finished your table touch-  
ing the divisions and differences of fractures, againe  
nature,





dislocated into the native and wonted seate, Last of all we  
 doe take awaye that which is superfluous, when as we  
 take awaye tumors against nature, as Ganglions, Caners,  
 Podes, Strumae, & warts, called Achrocordons also taking  
 the water out of the bodies of those which have a droppe, or  
 taking awaye the first finger or toe of the hand or foote.

John Vales. All thing I will keepe well in memorie.

John Field. The Chirurgion must also in these his ope-  
 rations observe five things principallie. First, that he doth it  
 safelie, and that without hurt and damage to the patient.  
 Secondly, that he doe not detract time, or let slip god occa-  
 sions offered to working, but with such speed as arte will  
 suffer, let him finish his cure. Thirdlie, that he worke gent-  
 lie, curteouslie, & with so little paine to the patient as conue-  
 nientlie you may, and not roughlie, but cheere, ruelie, and  
 without a continuall. Fourthlie, that he be so free from craft  
 & deceit in all his workings, as the Case is from the Chest,  
 spiritlie, that he taketh no care in hand for lucre or gaines  
 sake onely, but rather for an honest and competent reward,  
 with a goodlie affection to see his diligence. Last of all, that  
 he maketh no warrantie of such sickness as are incurable,  
 as to cure a Cancer not victed, or Elephantiasis confirmed,  
 but circumspicte to knowe what he can do, & promise no  
 more than he can performe, and you shall do these things  
 much the better, then without these you cannot anie thing  
 profit your patient, if you understand the manner and man-  
 ners of stitching wounds, of making tents, splines, stiches,  
 bolsters, and consequent rollings, wherefore, if the day will  
 thereof suffice, we will declare & make plaine these things  
 this day and so finish our parte of the institution of a Chi-  
 rurgion. A second day we will shew you how to make  
 John Vales. You let us knowe the benefit heereof, for both  
 if we were to depart without the knowledge of them, as for that  
 you will make mention of stitching, I praye you first begin  
 with the first. And so we will proceed to the second.  
 Thomas Gale. Then you must well marke be diligent  
 hee knowe that there are three kindes of maner of stitching,  
 first, a simple, named by the Greeks a *Stichos* in Greek word.

glutinatione of incarnative: the second is named compresse  
sue: the third is referuatines, of these we will order in the  
treate, and first touching incarnative stitching, note that the  
use of it is in all greene and fresh wounds made in the fleshy,  
whose lips or sides cannot be conserued and kept together,  
onely with rolling and ligature.

John Yates. And may not this kinde of stitching be used  
also in olde wounds?

Tho. Gale. If you will use it in olde wounds whose lips  
are hard and thicke, it becometh you first to make scarifica-  
tion of skinn about, and so let blood flow out, and then you  
may use it, and note that there are three kinde of  
stitching incarnative.

John Yates. Which are they?

Tho. Gale. I will set them out unto you. The first kind  
is done with an euen, strong and soft, thred of silke, making  
the first stich in the middell of the wound, then the second  
stich in the middell space betwixt the first stich and the  
one end of the wound, and the third stich shall be like the  
second in the other side of the wound, and so ever betwixt  
two stiches in the middell, take another untill the sides of  
the wound be aptlie and decentlie toynd together. And  
you must also take heed that your stiches be not thicke  
or thinn set. For if they be too thicke, you shall (as Celius  
sayth) prouoke colour and paine, and cause inflammation,  
also if they be too thinn and rare, then it cannot containe  
the sides of the wound together. The second kind of incar-  
native stitching is used in great wounds of the thighs and  
shoulders, and is in this manner. Joyn the sides of the  
woundes together, and make holowmany stiches it requi-  
reth, and for euerie stich you must provide a needle and  
a thred, and put a needle in the middell of the wound, and  
turne the thred round about the needle many and sun-  
drie times, and the needle remaine still in the wounde un-  
till the consolidaion of the same. You must in like sort  
doe with the other stiches which are to be made, accord-  
ing to the quantitie of the wound. The third kinde of  
incarnative stitching is done with quilles or colles made



of stompes, in the bignesse and forme of quilles being wyshed, and made even and smooth. And this waie of stitching is thus: You shall draine the sides of the wound together, putting your needle and thred through both sides of the wound, and againe put the needle backe againe through the same hole, and so leaue a loupe of the thred behinde, into which you shall put one end of the quill, then draine straight both endes of the wound together, and fasten them to the other end of the quill, and cut off the thred, and let the quills so remaine untill the wound be perfectlie healed. The fourth kinde is done by hokes, great or little, according to the bignesse of the wound, and the hokes must be crooked, and bowed at both ends. You shall fasten an hoke on the one side of the wound, and draine the other end toward the other side, in which you shall fasten the other hoke. This kinde requireth no violence, but onelie serueth whereas the wound will easilie come together. The fift and last kinde of stitching is with clothes thre cornered, being of such bignesse, as may suffice for the hurt member. Which kinde of stitching is verie convenient in those woundes, whereas we will not haue the cicatrice to be seene, as in the face, and these clothes must be wet in some viscous and glutinous liniment, and laie them to on either side of the wound, and when they be dried, you shal make your stitches in the cloth convenientlie and aptlie, and so ioyne the sides of the wound together, and these be the five kindes of incarnating stitching.

John Yates. There be two things touching these stitchings that I must require of you. The one is, what manner a needle we must vse in our stitching: the other, with what things we shall make our liniment, which must be extended on the linnen cloth vled in the fift kinde of incarnating stitching.

John Field. The Needle must also be long and small, being thre square, the eye hollowed in, that the threde maye the easilier followe. To the which Needle there must be likewise a Quill made hollowe, called in Latine Canula, this serueth to holde the  
D. iiii. Does

sides of the wound together treadfastlie while you make your stitching. As touching the matter whereof you shall make your liniment, it consisteth on Opire, Frankensence, Sanguinis draconis, Gallike, Sarcocolle, Witch, Pilbust, all these, or part of them, must be mixed with the white of an egge, and so extended on the clothes.

John Yates. While you understand right well, wherefore we proceed to the second kinde of stitching, which you call compressive.

Tho. Gale. That stitching which we call compressive bled to stale and stanch great sure of blood, is in this sort: Fold in the sides of the wound, as the skinner do in closing their skinnings, and stitch them, overcalling them. And we use this also in wounds of the intestines, and panicles wounded. But this kind of stitching, in my opinion, is not so good and safe, for that if one stitch breake, all the other are loosened.

John Yates. When I praye you proceede to the third kind of stitching, called Reiterative.

John Field. This last kinde serveth onely to keepe the sides of the wound together untill it be made whole, and is in like forme as other common stitchings, saving that the sides are not so straight drawn together, as in other wounds, & is right good in wounds ruptured and rupting, and whereas things are afterwards to be taken out, and when as the wound must be purged, and this shall suffice touching the knowledge of stitching. There bee other inventions and waies of stitching, which are to be learned rather by seeing the cunning Chirurgion worke, than by many lines set out in books.

John Yates. When I praye you proceede to liniments and ointments.

John Field. Oints & liniments to be profitable, no man saith in Chirurgie doubteth, but at this present it shall be sufficient to shew when, how, & to what ends, they be used: & also of what matter they are made, & of their diverse sortings.

John Yates. I praye you shew how many kinds there be of oints.

John

John Fielde. Into his first 20. bles and 10. bles  
 John Yares. Which are the said 20. bles. Captain  
 John Fielde. First one bles tentes do enlarge & amplify  
 a wound, by to multiply the same, and increase matter and  
 fumes, is to be taken out of deepe wounds. Secondly, we  
 are constrained to bles tentes in profound and deepe wounds,  
 which of necessity require a new legending of flesh and  
 thereby, in wounds which through the eyes are infected,  
 therefore are made filthie and fumes, and stinkie and  
 infection. Fourthly, we must use them in contused wounds.  
 Fifthly, the use of them is right profitable in wounds, that  
 hath inflammation, by both ally tunc, against nature joy-  
 ned with them. Sixthly, in wounds to which some of hit-  
 ting in such wounds are, not aptely to be  
 glutinated, but rather kept open, for that if we be-  
 leue Cornelius Celsus) all bying do the participate of the  
 wound, and therefore that must be dyalced out, and not kept  
 in through which is the healing of the wound. Seventhly,  
 we do bles tentes & linements and those linements, inducing  
 the healing of the wound, the better it is, if we be true  
 in such wounds which are digested into nature of blood.  
 John Yares. So much you have shewed to what ends tentes  
 serue: I pray you let out the matter and substance wher-  
 of they be composed: from so much as is said in the  
 book of Galen: for the better understanding here of, it beho-  
 ueth to enquire, for what cause & infection they are made:  
 for knowing they be bled to cleanse and purge the wound,  
 then they are made of soft and olde linnen cloth, sometime  
 they are made to keepe the wound open and wyde, and then  
 they are made of stipes cleane and well kempte, or else of  
 cotton wolle. And for that cause also, there are tentes made  
 of siluer & copper: being made hollo, and put into the  
 wound, for the sake, in wounds of the nose, wher-  
 by he may both aply brayn in the eye, and also the wound  
 be purged of such filthynesse as groweth therein.  
 And furthermo, when as we will amplify and enlarge a  
 wound, than we make tentes of sponges, or the rube of the  
 gentian, for these sucking the moisture in the wound doe  
 D. v. there



therewith swell and sore bigger, whereby the wound is enlarged. And as touching the forme and figure of tentes, they are made long, short, bigge, and little, according as necessitie require, but yet this is generall, that all tentes be made bigge at the one ende, & lesser euer toward the other: lesse, that they might slippe into depe woundes. And these tentes are sometime dipped in vnguents, & sometime put into the wound toicker dyes, according as occasion is offered, and this shall suffice, touching tentes, their use, forme, and matter on which they are made.

John Yates. **Boullsters** follooweth next.

John Field. **Boullsters** called *puluis*, or *plumacioli* are much profitable and necessarie in woundes: for they compass the member wounded, and nourish, and conserve naturall heate, and keep the member from the weight and paine of the rollers: and in the olde tyme they used to lome betwixt two cleane and white linnen clothes, feathers, and so made boullsters, which they used as is aforesaide. But for as much as they were compelled restles, and often to alter the boullsters, being inserted through continuall making newe, they innited to make boullsters of steepe, made witht sawe. Sometime they make these boullsters of woll, or cotton finely carded, and now it is in common use to make boullsters of fine and soft linnen clothes thysse or more times doubled, as necessitie requireth. Also many doe make and ordaine boullsters of sponges: of these boullsters some be applied wette, and some be used drye, & there be for the more part. his kinds of boullsters.

John Yates. Which are they?

Tho. Gale. **Retentive**, **conglutinative**, **expulsive**, **restrictive**, **coaptative**, & **conservative**. These take their names of their use & office, for those boullsters which be retentive, serve in woundes, for to stanch blood, being but little & final, & laied on a stupe or splegiant, mixed with the white of an Egge, and some restrictive medicine. The conglutinative boullster serveth to kepe the sides of great woundes together, after that they be stitched, and the forme of these boullsters according to Aulcen, is thus composed, & so adapted to the member & one of the

the corners of either bolster in the wounds. The second  
this bolster is ordained to put out matter or sanies in  
ulcers & wounds, which be deep & hollow, & these be made either  
of linnen cloth, or else of sponges. The restrictive bolster is  
made of linnen clothes doubled st. or lit. folded, but in using  
of vinegar, or other decoction, & so turning out a laide on ei-  
ther side the wounded part: & this doth restrain the flux of  
humours flowing to the part, & keepeth back inflammation &  
other accidents, which might infect & greve the weak member,  
& the vse of these bolsters is right profitable in fractures bo-  
nes or luxations. The confortative bolsters serve to confort &  
strengthen the weak member, & are diversly made, some of  
fine linnen clothes, in which is sown feathers, & this is made  
like a quilt, & serveth for the armes, or legges, to keepe them  
warme, & noisly natural heate. There be also some made of  
tow, which are accommably vied in wounds of the head.

Other are made of sponges, dipped in some hot liquor, or  
oyle, & after turning out and applied to the joints, and colde  
parts.

The conservative bolster serveth in luxations, to haue the  
member reduced to his natural forme, in the same state, as  
the shoulder bone being reduced to his wonted seate, we lay  
a bolster under the arme, or on the comonly say, in p arme  
pit, & these be the most notable, & viall kinds of bolsters  
used in the art of Chirurgie.

John Yates. If you in like manner make plaine vnto me  
the manner of ligature and rollings, I shall thinke my selfe  
obliged for this present.

John Fields. I will fulfill your request, and first  
following Answer in his fourth Pen. of his fourth booke, we  
make three sundry kinds of ligature or rolling, that is to  
say, incarnative, expulsive, and retentive: the incarnative  
or rather conglutivative, is vied in greene wounds, or frac-  
tures.

And the roller must be rolled by on both sides of a wound,  
& the beginning of a ligature must be on the contrary or  
opposite part of the wounded place, beginning the one part of the  
roller, towarde the higher part of the member, the other  
toward

follows the lower part. The breadth of the roller must be such, as may cover all the wound, besides some parts of the sound flesh. The roller must be twisted firmer upon the wound, than in the other partes: but yet not so strait, as may cause colour by paine, inflammation, or cure of humours, and let the edges of the roller be strept moderately, untill you are a litle more than 1/2 of the wound.

The second sort of rolling, called expulsiue; is properly used in old and hollow Ulcers: & this sort expell the matter, and filthiness gathered in the bottom of the ulcer by the mouth and sides of the same. This is with a roller beginning at the lower part of the affected member, and in making the ligature straight, and so proceed to the upper part of the member, making your rolling tetter, untill you come to the orifice of the ulcer.

John Yates. Be not offended I pray you, though I seem to breake of your talke, and bidde you proceede further, let me understand what you call the higher part of a member.

John Field. I call (with Galen) the higher part of a member, that which is most nere the liver or heart.

To Yates. When I pray you returne to your former talke.

John Field. Where ye remaifestly to speake of the third kinde of ligature, which is called circumferencie, and this kinde both serue to keep on medicines on the wound, or other part affected, and in Apollumes, and other ill dispositions, and this is done with one onlie roller, beginning first on the part affected, and so proceede according to the direction the roller with stitching, and this kinde of ligatures must be done softly, gently, not so hard or strait, but without colour by paine, and must be loosed when necessity sothe require, and if that it to stretch the roller to drawe out the medicine or matter, take it not always with violence, but doe it so long with gentle hande untill it will of the one accord loose, and be taken a waile without grieve or paine, and then your roller be made of fine and softe linnen clothes, not so much as you are unable to handle, let it be as long as the length and breadth of the part affected both require, for example, if the legg must be

fine



five fingers in lathone, for the same these fingers be made, for the finger the collar being a finger by more shall suffice. As touching the longitude or length of the roller, it is to be made as much as he require, and occasion is offered, as will be knowne to a Thoroughwell then, saying that we have ended this talke of stitching, tentes, boulders, cupes, and rollings, we will here conclude for this present; for behold the Sonne byaweth farre well, and the time will scarce suffice for your journey hitherward; and what you here doe want, you shall finde in other of my booke; but in our going toward the citie, let me heare what you haue booke away of this payed talke.

John Yates. I will repeat in briefe wordes so much as I can remember.

1 First when as I met you in the morning, being in talke of Chirurgerie, you shewed me what it was, & gaue me thereof diuers definitions.

2 Secondly, you promised to telle the third part thereof, phisike, and shewed the antiquitie and worthinesse of the same, with certaine noble princes and captaynes, who were wise Chirurgiers.

3 When you saide that Chirurgerie did consist of two parts, the one being called the theoretike, the other the practise.

4 After that you declared what was subiect unto Chirurgie, the thing on which the Chirurgion doth exercise his arte, and also what was the end of Chirurgerie.

5 Further you set out what manner of parson he should be that must learne the arte of Chirurgerie, and what conditions are in him required, and what the cause was that there is so many rude Emperikes and vnskillfull professors of Chirurgerie.

6 Lastly, you did make mention of the chiefe & most necessary instrumente, wherewith a Chirurgion ought to be furnished, both metalline and medicinall, with their proper office and vse.

7 When you set out the methode and way to be obserued in learning the art of Chirurgerie and of the right vse

## An Indication

of instruments both metalline and woodhall: **8** Next followeth such sentence as fall vnder the handes of the Chirurgian, that is to saye, cures against nature, wounds, vlcers, fractures, and luxations, with the definiti-  
 ons, distinctions, differences, and diuers names of euery of them.

**9** After these things finished, you set out certaine kinds of solution of continuitie, taken out of Galen.

**10** Also you set out the operations of the Chirurgion, which are required in curing the forenamed griefes; what things are herein to be obserued.

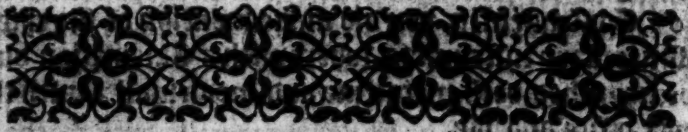
**11** Finally, you set out the art and maner of stitching, tentes, phumaces, supes, poultices, and collings, with their differences, substance, figure, vse and commoditie, these seeme to be the argumentes of this dayes talke, except I be de-  
 reined.

**Tho. Gale.** They be so in vade, and now behold, we be come to the Citle. Wherefore we will now leane of talke here, and you both shall this night take part of such chere, as God hath sent me, and let vs recite our spirituall merrie, I pray you.

**John Field.** I thank you heartely sir, and I reioyce that my brother Yates hath so firme and perfect a memorie, God send more such to followe Chirurgie.

**John Yates.** I thanke you both, for the great benefit I haue receiued at your handes, and God graunt me to spende many dayes in this sort.

**AMEN.**



John Yates. I thanke you both, for the great benefit I haue receiued at your handes, and God graunt me to spende many dayes in this sort.

# AN ENCHIRIDION of Chirurgie, containing *the exact and perfect cure of wounds,*

Fractures, and dislocations: newly compiled and

published by Thomas Gale, Maister in

CHIRURGERIE.

**RICHARD FERRIS SERGEANT**

Chirurgion unto the Queene: most excellent

Maister unto his loving friend Maister

Gale, sendeth greeting.

**T**WO things there be at this present which moueth me  
to adressed my letters to you maister Gale, of which  
the one is the ancient and famous arte of Chirurgie,  
which was in times past noe an arte of it selfe, but  
one portion of the curatiue part of Physicke, called Therapu-  
tice: the other, is my native countrie. These two by your la-  
bours and paines, I trust shal receiue no small profit & gain,  
and these make me to write my letters gratulatory vnto you.  
First that the arte of Chirurgie, who being now so decayed,  
whote fame so obscured, hir beautie eclipsed, and vilitie of it  
diminished, shal by you be somewhat brought to hir wonted &  
pristine state. For it is in far worse case now in this our sa-  
uorous and raging season (in which good artes are contemned,  
or els little esteemed & had in price) then it was in the time  
of Mantuan the Poet, who exclaimeth in this wise,  
Fama quidem manet, vilitas antiqua recessit.  
The Poet speaketh of Physicke generally, saying the ex-  
cellencie of it, & the great vilitie that hath come to mankind  
by it in the olde time, as the workes and volumes of the Greke



## An Epistle.

writers do testify and beare witnesse and conferring further  
their testimonies with the poore fruits of it that did spring in  
his time; as one lamenting the decay of so noble a Science, and  
great gift of God to mankind, sayd in effect

**H**is noble fame yet still remains, but few doth health by hir attaine.

But few doth health by hir attaine.

He speaketh it in the way of comparison, that there did not  
so many by the benefit of Phisicke receive their health as did  
in the olde tyme. But I leaue Phisicke, and will speake of  
Chirurgerie, both our professions. Surely, I dare boldly af-  
firme, that if Mantuan were here living, and did behold the  
state of Chirurgerie, he would not say that her fame did yet  
remain, but rather that neither fame nor yet great vse remain-  
ed: I had almost sayde that it was knowne but by  
name. And what be the causes that she is brought to this alle-  
nable estate? I shall say that which I knowe to be two prin-  
cipal enimies. The one is the Chirurgion himselfe, who neither  
knoweth nor yet laboureth to learne his arte, but being infla-  
med with the love of turpe lucrum, rudely and blindly exer-  
ciseth his arte. The other enimie is the patient, who hath neede  
of Chirurgeries ayde. For he will have in lyke estimation, a  
cobler, a loyner, a Minstrail, a Woman, yea, and a Horse-  
leach, that he will an expert Chirurgian, yea, and reward  
them as well, if it be not better. The remedies for one  
of these mischiefes, you haue, I hope in time provided.  
I meane, in setting out your Enchiridion. For there  
shall those that in dede are licensed to exercise Chirurgerie,  
finde no small portion of this arte, compendiously and faith-  
fully gathered together. Wherefore leaving other their au-  
thors in which many errors are hidden, I doe exhort them  
that both for the fame of Chirurgerie, which they ought to  
their vttermost to maintaine, and also for their owne game  
and profit, they wil not onely read this Enchiridion, but read  
it againe, not leaving until they be made well acquaint-  
ed with the same. And if by place do remaine obscure and  
dark, they yet haue you the author to resort unto, who wil

as gladlie, I am sure, open the meaning of them, as hee hath willinglie for their gaine and profite composed the same. As for the other enimie, I meane the like patients, it dooth not much force, for they are enimies chieflie to themselves, when as they fall into the hands of such rude and buffardie clouters. And although the patients being maimed and brought in perill of death by such, doe exclaime against Chirurgerie & Chirurgions, yet if the Chirurgions themselves studie to be learned, and excell such rude Emperikes, the slander shall returne to the authors thereof againe. The second cause of my writing, was for my native Countries sake, that like as you have laboured from the time that you were in my gouernance and teaching, to profit in the same, and have now shewed an evident signe and token thereof in this your Enchiridion: so you will not cease to continue in these your good enterprises, and your Countrie shall reward you with honest report and perpetuall fame. Thus I cease to trouble you further, looking shortlie for the publishing of this and other your workes. At my house in Paddington: the second

of Iulie.



Chirur-

66 **C**hirurgerie, whose perfect light  
all other Realmes doe know,  
Whose learned men with diligence,  
dooth make it shine and show.

In our coast hath not yet appeared,  
saue in most obscure wise,  
Thorough duskie cloudes of ignorance,  
that science doth despise.

But maigre now the mallice great,  
of Momus and his sect,

A most cleere Gale doth blow awaie  
those cloudes, and them detect.

As after rinde and cloudie aire,  
the welkine becometh bliew,  
Is sometime scene, when windes most drie,  
haue changed to the hiew.

Therefore to this excellent Gale,  
see that you thankfullie  
Giue condigne praise, and praie that he  
may moe such blasts applic.

That the armade of learned ships  
belonging to this art,  
May waigh the ankers, spread the sailes,  
and from rough seas depart

While this Gale blowes, that some of them,  
arise may at our porte,  
That to the fleete of knowledge once,  
young learners may resort.

Purchasing there with diligence  
science that will remaine :  
Leauing a part vile ignorance  
the mother of disdaine.

John Hall Chirurgeon.



**THOMAS GALE CHIRVRGION,**  
 vnto the young men of his Companie, students in the noble  
 art of Chirurgie, wisheth the grace of God, perfect  
 knowledge in their Art, and most happie &  
 prosperous successe in the same.



When as I had for your sakes (deere brethren)  
 written my booke, intituled, The Institution  
 of a Chirurgion, and thought to haue proce-  
 ded no further touching the practise parte,  
 but minding to send you to Guido de Cau-  
 liaco, Bruns, Lanfranke, Vigo, or some other  
 of our authoys in Chirurgie, which doe thereof intreate: I  
 could finde no one that might answere my desire, for ey-  
 ther they writ in the tongue which the most of you under-  
 stand not, either vse they corrupt and barbarous names of  
 sicknesses and medicines, or they be tedious long, or else  
 to concise and briefe. Furthermore, they were full all a-  
 full of errors, that they are anchie for the learned to reade,  
 who can discerne betwixt truth and falsenesse. Wherefore  
 knowing your desire to learne, and seeing the want of such  
 Authoys as you should profit by, I lamenting the case, and  
 tendering your wealth, haue taken the pains to compile you  
 this briefe Treatise, called an Enchiridion, in which you  
 shall finde the methode and waye how to cure all woundes  
 both in limber and in instrumentall parts. Also how to unite  
 and heale fractured members, and to reduce stepost againe  
 into their wonted and naturall place, such bones as be dislo-  
 cated. Diuerse secret and perfect experiments I haue made  
 open vnto you, whereto be like to worke after the doc-  
 trine set out in this Booke, and take these my labours and  
 a pledge of my good will toward you all, and long me as  
 I shall still as you haue begun. At my house in  
 London the second of August.

E.i

The

# The first booke of the En-

chiridion of Chirurgerie, containing the exact and  
perfect cure of wounds made in the simi-  
ler parts. By Thomas Gale.

(The first booke of the Enchiridion of Chirurgerie)

**I** Draught as in this present treatise (which  
I do compile for the instruction of those that  
professe Chirurgerie) I do purpose to intreat  
orderlie of wounds, fractures, and dislocati-  
ons. I thinke good first of all to set out what  
a wound is, & how many differences there  
be of wounds. Notwith my principall scope tendeth rather  
to teach the practise than the Theorike at this present.  
Wherefore a wound is named a solution of continuitie, new-  
lie made in the softer parts of the bodie, without putrefacti-  
on, corruption, or matter. For if anie matter, putrefaction, or  
corruption, followeth, the it is no more called a wound, but  
an ulcer. Of wounds I do make two differences, for either  
it happeneth in the similer parts, as in flesh, arterie, veine,  
nerve, bone, &c. or else in organike or instrumentall parts.  
Of these two sortes of wounds we will now in generall in-  
treate. And for because the least and smallest wounds re-  
quire least labour, diligence, and cunning, and that the sim-  
plest must be most easie things be first exercised and treat-  
ed up, I will shew you brieflie the cure of a simple & small  
wound, where the skin onely is divided or cut. You shall  
aplie together the lips or sides of the wound together so even  
as possible you can, then make a fuso with Laine and the  
white of an egge, mixed with a little salt, and apply it to the  
wound, then roll and bind it according to arte, and this is  
sufficient in such kind of wounds. You must also command  
the patient that he exercise not the wounded member, least  
that he causeth accidenta to fall to the wound, as inflamma-  
tion, flare of humors, dolour and paine, &c.

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The

The cure of great and deepe wounds, and of diuerse kindes  
of Sitching. Chap. 2.

If the wound be great in the flesh, and yet without accidents, you shall begin your cure in the Chapter before, that is, by compzissing and toyning the sides of the wound together, and then rolling and binding it. But if the wound be bigge, wide, or else ouerthwart the member, so that rolling and binding are not sufficient, then you are compelled to vse Sitching, of which there be diuerse sortes, and I will set out those which are most in vse. But or you goe about the Sitching of the wound, giue diligent heede that it be mundified and made cleane, that there remaine not in it either anye uncleannesse, as haire, dust, oyle, or such lyke, which may hinder the adglutination of y<sup>e</sup> wound. You must for your Sitching prepare a thre square needle made hole lowe in the eis, that the thred may the easier follow, and let your thred be even, without knots, well swined and waxed. When your Sitching shall be in this sort: Make you first sitch in the middelt of the wound, then a fingerbreadth from y<sup>e</sup> make another on both sides of y<sup>e</sup> middle sitch, and leaving the space of a finger breadth, make so many sitches as the wound requireth. And take this for a generall rule, that you neuer begin your sitching at the end of a wound, because throught that occasion the wound might be dea lwen a wrie, and the member lose his beautie, and sometime part of his office, and beginning your sitches in the middelt, this followeth of necessitie that your sitches shall be odde, if there be more or lesse than thaine. And if the wound be deepe & ouerthwart the member, then you must make your sitches deeper, and that for two causes, the one, for that it should not breake out againe, the other, y<sup>e</sup> the wound might haue lesse matter, and better take consolidation. And when you haue thus sitched y<sup>e</sup> wound, you must ouercast y<sup>e</sup> thred twice or thrice or you knit your knot, otherwise it will break out or you can knit your knot, y<sup>e</sup> passed which I haue sene among the vblearned Chirurgeons. And when your wound is thus sitched, then take Tow & make a Ruse with  
C.iii. the



## The first Booke of

the whitts of an egge, and this powder following, and lay it on the wound, and though it hath not bene used before this time, yet it is both better and more convenient than that which is mentioned in the last Chapter, and this is the first kinde of stitching.

The description of the powder. Rec. Olibani, p.ij. Sanguis draconis, p.j. Calcis ex ouorum testis, p.ij. Ex his fiat pulvis subtiliss, secundum artem.

The second kinde of stitching, is to sewe over the hand, as the skimmers doe, which is used in woundes of the intestines, or whereas Syphach is sowd to spirach. The third kinde is to put the needle through both lips of the wound, letting it so still to remaine, and wind the thread six or seven times about the needle, and this is used in wide & large woundes. The fourth manner of stitching is, when as a veine or arterie is cut, and we use to stae the sure of blood, especiallly whē as Vene ingularis is cut. Then we thrust the needle through that veine or arterie, and then knit the same with the thread, then drawe out the needle, and let a portion of the thread hang out so long, untill it falleth awaie. The fift sort of stitching, is used in woundes of the face, or delicate and tender bodies which are not able to sustaine the paine of stitching with the needle. And the stitching is in this sort. Take little peeces of linnen cloth three square and spread them on this vnguent following, and laye on euerie side of the wounde the peeces of cloth euerie one from other an inch, and when as the clothes are dried well, then stitch them, and drawe them together, and use the wound in all other points as is aforesayd.

The making of the vnguent. Rec. Dragagani, Sanguis draconis, Olibani, Mastiches, Sarcocolle, ana, j. dragme, Pulueris volatilis molaris, ij. dragmes, Albuminis ouorum, q. s. ad incorporandum.

Of woundes in veines and arteries, Chap. 3.

When as it happeneth that the veines are cut & wounded, you must diligently marke whether they be Venae Capillaris (that is to saie) small veines like haire, or else ante

and of the greater heines, if they be the shill beined, it shal  
 suffice to stich the wound, & use the powder desiccative men-  
 tioned in the Chapter going before, with yolw and the white  
 of an egge. But if anie of the great beines be wounded, the  
 the cure aforesaid is not sufficient. Wherefore you may at-  
 tempt to stay the floure of blood with binding the contrarie  
 side to the place wounded, or with letting of blood in ano-  
 ther place, whereby there is made diversion of the flure. Al-  
 so with frictions and rubbing the contrarie parts. If these  
 suffice not, then you must applie caustike pouders, as Arse-  
 nicum sublimatum, Vitriall burnt, unslaked lime, or such  
 like, or else make cauterisation with an yron, or stich the  
 end of the veine, and lay some desiccative powder on it, and  
 so dresse the wound, letting it so remaine foure daies. And  
 if there be anie asker, you must applie to it the white of an  
 egge, and oile of Roses, well beaten together. And the cure  
 that is here spoken of veines, is also to be vnderstood of ar-  
 teries, and the waie to know whether a veine or arterie is  
 wounded, is by the issuing out of the blood. For in an arte-  
 rie cut, the blood commeth leaping and springing out with  
 some stay, according to the dilatation & compression of y<sup>e</sup> arterie.  
 A powder desiccative. Rec. Olibani, ʒ. ij. Aloes hepaticæ, ʒ. j.  
 Pistorum leporis mirum concesso, Albuminis ouorum ad in-  
 corporandum. Lanfranke giveth great praise to this medi-  
 cine, and maketh mention of a child three yeeres old, bearing  
 a knife in his hand, fell on it, and wounded his throte, so  
 that through flure of blood the pulse began to cease, and the  
 childes sight to decay. Lanfranke comming by, layd his fin-  
 ger on the mouth of the wound to stay the flure of blood,  
 then he tempered the powder with the white of an egge, and  
 laide it to the wound, letting it so remaine foure daies, and  
 when he would have taken it away, it was so drie, and clea-  
 ned so fast to, that it might without paine be removed, without  
 wherefore he applied the white of an egge & oyle of Roses  
 beaten together to the place until the next daie, & the wound  
 was found perfectly healed, to the great admiration of the  
 people which did behold it. Another desiccative powder. Rec.  
 Calcis viuz, Sang. draconis, Aloes hepaticæ, Fiat puluis ana. ʒ. ʒ.

B. iiii.

But

But if you will haue another, which is testy and restraineth more, use this following. Rec. Gallani, Sanguis draconis, Boli armeni, Thuris, Aloes hepaticæ, Mastiches, ana. ij. dragmes, Pilorum leporis, iij. dragmes, fiat puluis crassus. Rogerius and Iemerius used another powder; which is not onely excellent in staying the fluxe of blood, but also both ericate and drye, whose composition is in this manner following. Rec. Colophonij, vi. ounces. Boli armeni, ij. ounces. Mastiches, Sanguis draconis, Olibani, ana. j. ounce. Radicis consolide maioris, Rosatum persicarum, ana. ʒ. j. Fiat ex his omnibus puluis. Vses vt supra. Brunswicke remetheth a stone which hee calleth a Blond-stone, (but yet not that which are named Iaspis, and Hematites) and it is in colour pale, whitish, with small redde veines, and is found in Spaine, whose Powder hee preferreth before all other things in staying the fluxe of blood in woundes, veines, and arteries.

Of the Wounds in Nerues or Sinnowes. Chap. 4.

**I**f a wound it maye happen the Nerue to be diuided in length, and sometime ouerthwart, which is verie perilous. Also sometime the Nerue is pricked with a needle, bodkin, alle, thorne, or such like. Vnto all this, to cease the colour and paine of so sensible a parte, you shall vse Oyle of Roses, made with Oleum omphacinum, somewhat warmer than the patient can well suffer. Also you may make a good digestiue of fine Turpentine well washed in the waters of Plantaine or Hypericon, and applie it to the wound. And if these with often application ceaseth not the colour and paine; then take Olei Rosacei, two ounces; Boli armeni, two drammes, and Opij a little, mixe these together, and applie it warme to the wound. And when the paine is ceased, and the wound cometh to maturation, then you maye heale it with the drinke Plaster used in greene woundes, which you shall finde in the Antidotarie. You shall also not onely in wounded nerues, but also in all other woundes use Unguentum de vermbus, whose composition is in this manner

Rec.



**R.** Centaurij minoris, Cynoglossi, Celsidæ minoris, Con-  
solidæ medix, Ana. m. j. Olei omphacini lib. i. Lumbricorum  
terest. Vini albi, ana. halfe a pound. Stamp all these toge-  
ther, and let them stand infused seauen daies, then stampe  
them with that. Sewi Olini, lib. ij. Picis, Resinæ, ana. ʒ. iij.  
Ammoniaci, Galbani, Opoponacis in aceto soluti, ana. ʒ. iij.  
Boile all these together untill the Wine and vineger be  
consumed, then straine it, and when it begins to waie cold  
adde to it, Thuris, Mastiches, Sarcacollæ, ana. ʒ. iij. Croci,  
ʒ. ij. These being made in fine powder, in the putting them  
in, stirre them well with a splatter oz sife that they grow  
not into clods and lumps. Also to defend the wound of sin-  
noves, pea and all other wounds from accidents which do  
commonlie chaunce, all excellent Chirurgeons vse to haue  
in readinesse this defensiu following.

**Rec.** Olei rosarum, ij. ounces, Boli armeni, Terra Sigilla-  
ta, Aceti, ana. j. ounces, Camphoræ, j. dragma, Solani, Semper-  
uiui, ana. m. j. Make of all these in a mortar a perfect un-  
guent. And if the wound be moist, and hath too much super-  
fluous matter, whereby it cannot come to adglutination  
and cicatrization. Then vse this medicine next ensuing.  
**R.** Mellis rosacei . ounces. vj. Farinæ Hordeaceæ, ounces. ij.  
Temper these together, and boile them, but suffer them not  
to burne, then put to it fine Turpentine (washed in the wa-  
ter of Hypericon) two ounces, mixe them and vse it to the  
wound.

A defen-  
siue.

Of wounds in which are fixed thornes, splints of wood,  
arrow heads, Gunshot, or such like. Chap. vi.

**W**hen an in woundes there happeneth to be fixed  
thornes, splints of wood, arrowe heads, Gun-  
shot, or such other like, the orifice of the wound  
is so narrow, that with instrument it cannot be  
take out, you must of necessitie labour to enlarge the wound,  
which you may do two sundry waies. The one is with  
tentes, as of the rootes of Geniuan, pith of Elder, or a peece  
of a Spunge: the other is to make incision with a paire of

C. b.

cissors,

enlarged sinners and proper instruments to take our wicked  
 sin things as are there injured, as tongues, or nippers, and  
 scissels. All these names are given to the same instrument.

Also you shall know in deepe wounds what part is hurt, by these signes following. As the braine being wounded, he shall haide scowmes and foame at the mouth. If the heart be wounded, there issueth out bloud blacke in colour. Also, if the lungs be wounded, the bloud is like a scowme. What if the stomacke be perced, the meate indigested cometh out. In like manner the intestines being wounded, the odour issueth. Furthermore, the vyne floweth out in wounds of the bladder: and so by that which is contained in the member, you shall coniecture the wounded part. Now as touching the taking out of such things as be fixed in the wounded member, you may procede principally three wayes. First you may vse such instruments before set out as shall seeme most necessarie. Secondly, if the thing fixed be so thick as a broad arrow head, or such lyke, and be perced through the greater part of the member: then it shalbe much better so thrust it through the member then to take it out at the orifice of the wound.

Laſt of all, if theſe two wayes will not ſerue, becauſe of the wounded place, then as much as you can make the wound ſunder by ſeris or inſiſſion, and laye maturatiues to it certaine dayes, and then that which is contained in the wound, will with leſſe difficultie come forth. You ſhall commaunde the patient to lay on the wounded ſide, becauſe the drinke which I uſe in ſuch wounds may the more rebely come to the wounded part. The compoſition of this drinke you ſhall finde in the Antidotiſtic. Alſo you may vie this plaſter following to ſuch wound which is right good in extraction of ſuch things as are fired on wounds.

The emplaster. Rec. Apostolicō descrip. Nicholai. iiii. vnces. Magnetis orientalis. ij. vnces. Polipodij. Dietamē albi. a. na. halfe an ounce. Pinguēdinis leporina. ij. vnces. Olei cana- bis. i. vnce. Terrebenthina. halfe an vnce.

72 Of all these make an emplaster. Also there is another  
come

composition of inuincible vertue, in drawing out rotten bones, thornes, and other like things.

Rec. Nucis cortis palmularum, Stiracis rubei, Salis ammoniaci, Aristolochiz longæ, Rad. Cucumer. Afini. Teribinthinæ. Ana. v. drams. Piperis Albi, Piperis Nigri, Ammoniacy, Amomi, Xylobalsami. Thuris masculi, Colophonij. Ana. ij. dragmes and a halfe. Fecum olei liliacei. q. s. Ceræ iij. dragmes, fiat vnguentum.

But in arrow heads or shot poisoned the medicines rehearsed are not sufficient. Wherefore you must giue the patient some antidotum of Alexipharmacum, against venoms both inwardly & outwardly, inwardly you shall giue him euery day this potion.

Rec. Vini cretici, Sublimatæ rutæ. Ana. vnces. iij. Tormētillæ, Dictami. Ana. ij. dragmes. Theriacæ opt. i. dragme. Bulliant ad consumptionem tertie partis.

Outwardly into the wound you shall put oyle of violets warme, which oyle must be made of Ling seede oyle. You may also wet your rent in the same oyle and also mixe it with your other medicines that you apply to the wound.

Of contused, broysed, or crushed wounds. Cap. vi.

**I**n contused wounds, the methode curatiue differeth fro that which hitherto is mentioned. For in these wounds first you shall apply maturatiues, whereby that which is bruised & seperated from the unitie of the part, may be turned to matter (they call it in latine sanies vel pus) & when it cometh to maturation, then you must vse mundificatiues to mundifie the wound, vntil it be cleane & void of matter. The next intencion is to ingoer flesh, which you must do with incarnatiue medicines, & neuer be diligent to desce the contused member from accidents, with oyle of Roses warme applied to the same. As touching maturatiues, mundificatiues, & incarnatiues, you shall finde the (in) the Antidotarie, and in diuers parts of this worke.

Of deep & hidde wounds, which cannot be well perceived. Cap. vii.



**A churche of wounds:** the cure is done thus. **Washes.** First, if the place may suffer it without hurt of veines, arteries, and nerves, is to delate the wound with fents of Gentian, or of a Sprunge, and after make it open and large with incision. The other is, if the first waie can not be done without daunger: to put into the wounde a probe or waie candle, untill you come to the end of the wound, and make there an issue, that by this waie the matter in the wound may be cleansed with some mundificative lotion conueled into the wound by a siring. Let your rolling also be such, y it be loole at the orifice of your wound, for other wise you shall keepe the matter still in y wound. Neither shall you in mundifying the wound thrust out the matter, for so doing you shall thrust out the indigest matter in colour of blood, and hinder much the cure of the wound. As Brunswike maketh mention of a certaine Barber who had no knowledge in Chirurgerie, & yet would take vpon him to practise. This Barber (having a patient wounded in the arme) did euerie daie thrust out so much blood, and brought such accidents to the part, that if Brunswike had not fortunatlie come, the Barbers patient hadde lost his arme. Such is the fruits of blinde Emperies. You shall also about the wound applie some defensiu, and on the wound some mundificative, and make your incisions with a siring, untill the water come forth of the same colour as it was put in. The water used for incisions is made in this manner.

Rec. Mellis rosacei. vi. ounces; Rosarum rubearum, Florum camomilli, ana. iij. ounces; Mastiches, Treos, ana. j. ounce; Thuris, halfe an ounce, Mithrid, j. dragme, Vini albi. iij. pound; Aquatam plantaginis, vni. sive; Rosarum, Caprisoli, Foliorum quercus, ana. a pound;

Another more belement. Rec. Aluminis, j. ounce, Balanuslij, Nucum cupressi, Orob, ana. j. dragme. A drying water. Rec. Consolidæ maioris, viij. ounces, Penecidant, iij. ounces, Aluminis. 3. ij. Aquæ Fabrilis per filtrum desullatæ. iij. pound, Boile all into the consumption of the thirde part,

A Pondicative.

**R̄. Vnguenti Egyptiaci. j. vnces, Aluminis. j. vnce, Olibani, halfe an vnce, Myrrha. j. dragme, Vini rubei, two pound, brilliant pulliant.**

## Of Wounds in the bones.

## Chap. 8.

**T**he solution of continuitie in the bone, is in diuerse kindes, as fractures, splents, caries, & by wound, of which last we will onelie in this Chap. make mention. If the bone wounded doth hang to the pannicle which inuelted and couereth the bone, then doe what you can to cause it to soyne. But if this pannicle be also cut, then will not the wound be filled with flesh, except the peeces diuided be taken awaye. And to the wounded bone you shall vse Vnguentum aurum ex Mesues prescripto. After you must applie manducations and consoladatiues set out in the Antidotarie, and see that you vse in this wound apt ligature, and that it be open vpon the wound, that you maye daillie applie medicines to the place without losing of the roller. Furthermore, you must lay about the wound some defensatiue, whereby the part shall bee preserved from diuerse and sundrie accidents which might fall to the wound. The Chirurgion must also haue regard that the Patient keepe a moderate diet, & that he be soluble in bodie. Which if it cannot be by nature, then procure it may be done by arte, as by Purgation, Clister, or suppositoie. And in all other things the cure of this wound differeth not from the cure of other wounds.

**Of a new kinde of curing greene and fresh wounds with balme.**

## Chap. 9.

**T**he healing of greene wounds by balme artificiall is in this wise. Close the wound, & scitche it, make it cleane with a drie sponge, & put of the balme into the wound. See it hot, and dresse it twice euerie date. And here you must note that this balme taketh not like effect in all greene wounds. For the cure differeth according to the Countrey, complexion,

complexion of the partie and place that is wounded. For if the country be hot, the patient cholerike and the wound in the head, the baulme taketh not lyke effect, nor is to be ministered as before is saide. For the contrary being hotte, and the patient hotte, the wound cannot be cured with Balme, which is also hot. And it is a maximum in Whisicke, that infirmities are taken away by their contraries. How then shall the medicines lyke in qualities to the region and complexion, cure the infirmite? Except you wil aunswere me if doth it a propriate totius substantie, which is nothing so. What then, shall not Balme cure wounds in the fore named patients? Yes verely, and I will shew you in what manner. Stitch your wound as is before mencioned, and mundifie it with a dyse sponge, not dypt in water, & take away all the bloud about it, then take cotton and make a strophe and dyp it in Oyle of Roses and Balme, not beate, of each equall portions, and apply it to the wound. And defend the wounds with all diligence, from accidents, with some defensine: for to cholerike persons in hotte regions, there cometh accidents speedely. The like cure shalbe in wounds where as the bone is sene. Except that you must adde to the oyle and Balme, Terebentine wel washed, and the strophe being layde on the wound, you may further use a emplaster which customably is occupied in green woundes. And if the region be colde, the patient slegmatike, and the part fleshie, then apply your Balme hotte, for in those there follow of course small accidents, except it be by disorder of the patient, and fault of the Chirurgion, and great wounds in these persons wil some be cured. For this artificial balme hath in him the vertue attractiue, conglutinatiue, & desiccatiue: his discription you shal finde in the Antidotarie. Also in hotte regions, cold complexions, & in cold regions, cholerike persons shall soner be cured, then where both region and temperature of the patient agree in hotnesse. The like is to be vnderstood of a time of the yere. For the cholerike person being wounded, shall soner be cured with Balme in winter, then sommer. Also the wound being dressed, there are three kinde of ligatures or rollings vled as necessitie requir-  
reth.



feeth. The first maketh fleshy in the wound to growe, and is called *incarnatiue*. The second doth expel such matter and superfluitie as cumbereth the wound, and this rolling is named *expulsive*. The third retaineth and kepeth the sides of the wounds together, and such medicines are applyed thereto and is called *retentive*. Of the in our institution of *Chirurgie*, we doe make a most ample discourse. And thus briefly and compendiously we haue passed ouer the principall wounds, which may happen in the similar parts: Now time and order requireth, that with the lyke methode we intreate of wounds in the instrumentall parts.

FINIS.

## The second booke of the

Enchiridion, containing the curation of wounds in the instrumentall parts: By Thomas Gale Maister

in *Chirurgie*.



Although it might seeme sufficient for the general cure of woundes, to haue made mention of those which are contained in the first booke: yet seeing periculer exercise in *instrumental* parts is both delectable & profitable, and is as it were a master which teacheth: I will endeavour my selfe to set out particularly the cure of woundes in the instrumentall parts. And I call that an instrumentall part, which is not simple but compounded of the similar, as the head, the eye, the hand, the arme, and such like. And for because I wil orderly intreate of them, I doe diuide the bodie of man into iiii. parts, that is to say, into three ventricles, & that which the *Anatomists* doe call *artus*, containing the armes & legges. The first ventricle containing the animal spirits, giuing sence & motion to the whole bodie, is the head. The second comprehending the vital spirits, is from *Os forculæ* vntill *Diaphragma* vnder *inferior* ventricle receiuing *liver*, *stomach*, *splene*, *kidney*, *intestines*, *bladder*, & diuers other parts doth begin, and endeth at *Os pubis*.

And

And for because the soule is the most noble part of man, hath his seat in the head, I will beginne with the woundes of the head first, and let forth such things for the preservation of this so principall a part, as my poore knowledge & experience will extend vnto. And here loke not, I will loose time in rehearsing of weapons wherewith the part is hurt, as diuers do. For it helpeth nothing to the cure of the wound to say he was hurt with a staffe, clubbe, sword, shette, fall, or such like: but rather to looke to the wound it selfe, whether it be a simple wound, or that it be compound: whether it be confused, or else but cut: and so following the differences set out in the first booke.

Of certaine generall precepts, necessary to be followed in the cure of woundes of the head. Cap. I.

**W**ounds in the head are diuers & sundry, some are but simple woundes, being cut without any accidents or hurt of Cranium, some be with tucking also of Cranium, some be confused, and yet Cranium perfect, other happeneth with the breaking of Cranium, some are with perishing of Dura vel Pia mater, and losse of some substance of the braine, & others are without. But for that I would you should know whether the Cranium be fractured or not, I will giue you certaine proper precepts. If the confusion be great, if he fall from any high place, or haue a great stroke, if when he receiveth his breath, there cometh out moistnesse through the division or fracture of the bone, also vomiting, vertigo, bleeding at the nose or eares, the eyes red and swelling, want of spech, a sharpe fever, and difficultie of making his urine: all these shew Cranium to be fractured.

There is also another note to know Cranium fractured, and that is, to strike on Cranium yucke or Pastiche, and if there be any fracture, then in the place there will appere blacknesse, which is a most certaine token that the Cranium is fractured. Also in your prognostication you must con-

sider

And these be these sentences: Great speaking of Cranium is  
perillous, and the wound in the brain, or corruption of the  
Dura, vel Pia mater, is deadly and most all. If the blacknes  
of Dura mater when it happeneth, cannot be taken away  
with Mel rosaceum, it is a token of death. Also the Cranium  
is brained, wounded at such time as the spine is at the ful,  
(that is, when the is in opposition of the Sonne) it is verie  
perillous. And in curing the wound, if there be a tumour or  
swelling, & that same suddenly vanish, it is perillous. But in  
the consolidation of Cranium, if the flesh appeareth red, it is a  
good signe. Like as if in y wound there be good digestion &  
no accidents coming to the same. And for because in curing y  
wounds of the head there is diversitie in working, & diverse  
opinions, I thinke it good to set out certain documents which  
I take out of the famous Guido, whose words are these fol-  
lowing. First (saith he) the wounds of the head with brea-  
king of the bone have much difference from the woundes  
of the other members, both for the nerves to Cerebralis Me-  
dulla, so noble a part, & also for the round & spherelike figure  
& forme of the head, which hindereth curacion, & is vnapt for  
ligature & rolling. Secondly, y in great wounds of y head  
it is needful for to observe the chiefe intentions mentioned  
before in the treatise of Phlebotomie, & purging. That y bo-  
die be soluble, which if naturally it chaunceth not, the by sup-  
positio[n]e of clister or gentle linctue, you must make it lose. Als  
so the diet thin, &c. Wherby, y in wounds of the head y haire  
be shaven, & take heed that no haire, oyle, or water, fall into  
the wound, which may let consolidation of the wound, & that  
to resist colour both above & vnder, applye the white of an  
egge. And after the beginning, let things be used as is afore-  
said, to windosie and incarnate. And round about y wound  
alwayes use the Unguent with bole armoniacke and oyle  
of roses, that the colour and dis temperaunce of the part be  
all waged, and all apostumat[i]on put back. Fourthly, as you  
have often heard of Hippocrates, that all coloures is hurt,  
full to nerves, bones, and marrowe, and also the aire both  
hurt & after the principall members. And therfore in winter  
when y patient is dressed, let the windowes be close shut, & a

Tract. 3.  
Doct. 3.  
Cap. 1.



## The second booke of

god fire of coales, and dress it fine with a tangle; and when  
he is dressed, put on his head a coile or cap made of a thaps  
skin. Fiftly, if the wound be come to digestion, & hath mat-  
tier contained in it, & it be removed away with fine lint or  
cotto, so softly as may be, & this in winter must be but once,  
& in summer twice. Sixtly, & upon the tents there he laide  
a soft sponge to sucke & draw & receive out the matter, that  
it falleth not to the hyaine. Seuenthy, & you have a roll a  
yard long, & foure fingers broad, & that you shall roll it up  
within two handfulls of the end, & begin the ligature at the  
forehead, & extend it towards the eares opposite to & wound,  
& the other part to the eare next the wound, leaving & eares  
uncovered, and let the roller come downward to & first bind-  
ing, & doe it so many times untill the head be covered, &c.  
Eightly, take heed if there remaine any scale of a bone,  
in any the wound with wine. If there be no feaver give him  
this powder following. Rec. Pinpencil, Betonice, Gariophil-  
late, Valeriane, Ofmundre, ana, Pilosule quantum de omnib.  
fat pulvis.

Last of all, that the patient lie on the side which least grie-  
neth him, untill there be found matter in the wound, and  
then he must rest on the wounded part, that & matter may  
the more readilie boide. Thus much in effect touching Gui-  
do his counsaile. Also I wish fro the first beginning of the  
wound, untill such time as there is no feare of Apothumat-  
on, that you vse some mittig aaine, as oyle of roses three ounce  
ces, honie, one dram, mixe them together, and then you may  
also vse this powder, which drieth without corrosion or p-  
king. Rec. Irios, i. dram, Thuris, Aristolochie rotunda. ℞. ii.  
Corticum radicam papaveris, halfe a dram, Sarcocolla, Sang-  
draconis, Maculorum, Much eupressi, ana. ℞. iij. Make this  
in powder. Thus much I thought good to write before I en-  
tered the particular cure of organike wounds, being as  
guides and counsaillours to be followed through this whole  
booke. Now will I begin and shew their methodicall cure.  
Of simple wounds in the head with cutting, which happened  
neith without hurt of Cranium. Chap. i. ing y. noid

**I**f the wound be simple without hurt of Cranium, or loss of substance, then is the cure of it like the cure of other wounds, to scitche, roll, incarnate, and cicatrize. But if the wound be with the loss of substance, the you must dip your tents and cover your pleurants with incarnations, and cicatrize the wound with your accustomed powders, unguents, emplasters, and other things thereto belonging. As touching itching in the head, because many speake against it, I affirme it to be not onelie prestable in small woundes, but also in great most necessarie, for it keepeth the parts separated together, which rolling cannot. It also causeth that the aire doth not alter the part, which where it chaunceth, it is verie hurtful. And here I except great wounds in the fore part of the head, which may not be scitched but on the side, & putting in it oile of roses, which doth both take awaie the paine of the nervous pannicle inuelling and covering Cranium, if the wound be so deepe, and also it maketh the bones more easie to be dyaluen out, and taketh awaie the sharpnesse of Mel, when with it we intend to mundifie and inward pannicle, and defendeth from accidents.

Of wounds in the head with cutting and fracturing, or breaking of Cranium, but not through piercing. Chap. 3.

**T**he wounds chauncing in the head by cutting and fracturing of Cranium, going not through the whole substance of the same, is called Rimula. This wound either is great or small, if it be small, it shall haue the same cure mentioned in the Chapter next going before this. For in such a wound there is small generation of matter, and that engendered through his gross substance, cannot descend in the cut or rift. But if the wound be great, then is it either in the sides of the head or upper part of the head: if it be in the sides, it hath also the same cure that the wounds in the Chap. going before receiveth, except that in the lower part of the wound there be put a tent whereby if any matter be retained in the wound, it may the easier come out; but if the wound be in the upper part.

## The second booke of

part of the head, it may not be stitched, for that nature there cannot purge her selfe. If the fracture commeth to the middle of the two tables of Cranium, it is needful to take sheres called Angines, of diuers bignesse. And as the bone of the patient is vncovered, you shall vse the greater Angines, the after take those that are narrower, and so at length the narrowest of all, and this shall you doe at all times in the middle of the two Tables. Thus shall you speedily cure this wound with drying medicines and tents that shall sucke & draw out the mattier.

Of Wounds in the head in which Cranium is cut, vn-  
to the inward pannicle, without losse of substance.  
Chap. 4.

**T**his kind of wound wil haue sometimes sparanks or sharp peces of bones, & some are free frō them, & euen without sharp peces of bone. Whose I haue the sparanks do hurt & offend the pannicle which is called Dura mater; Therefore they must be taken awaie with a lenticular, and made smooth & euen, & then is the cure of this wound like the other wounds in the former Chapter. For if it be in the vpper part of the head, you shall vse to mundifie and desiccate without stitching, if it be in the sides, then in the lower part of the wound you must put a tent, as is aforesayd, that the mattier may the easier come out.

Of Wounds in the head contused, without fracturing of Cranium. Chap. 5.

**I**t is the proper scope of curing this wound to applye to it medicines that resist aune, and repell the mattier backe, being in the beginning, after the accustomed manner, the white of an egge, mixed with oyle of Roses, and so resolving the mattier gathered, you shal vse honie and wine in which salt hath ben put. But if it come to maturation, then you shall open it, and vse the cure so it that is proper for Apertumes, and such medicines as are mentioned in the general Chapter of contused wounds.

Of



Of wounds in the head with confusion and where Cranium  
 and the little fractures. This Chap. and the first of the 7  
 may thus be made. And thus it shall be made. And thus it shall be made.  
**Y**e must diligentlie looke whether in the place where the  
 Cranium is fractured, there are any sharpe pieces of  
 bones, which if there be, they must be removed with the den-  
 tistler, as is afore mentioned. Then you shall wype the  
 wound, & lay thereon soft silke, wet in hony of roses & oyle  
 of Roses, and with your instrument you shall put in the  
 linnen cloth betwixt Dura mater and Cranium, and lay on  
 it soft tents wet in Mel ros, and oyle of Roses, and applie  
 thereon a linnen cloth wet in the same, and on the wound of  
 the flesh put either drie lint or a soft sponge, to sucke up  
 the matter, and applie an head plaister, & the matter close  
 not within. After which you shal in wine made hot, wet tow  
 and presse out the water with your hand, & lay that also on,  
 then burne that put drie tow, and roll it softly, that & things  
 applied may abide on the wound. And when the wound is  
 mundified then leane off the first cloth, and use the head pow-  
 der to make the wound incarnate, & so with consolida-  
 tives and medicines inducing a cicatrice, you shall procede untill  
 the wound be perfectlie cured.

Of Wounds confused with great fracture of Cranium, &  
 Chap. 7.

**C**onfused wounds with great breaking of Cranium, must  
 be cured after this method. First you must shave & haire  
 awaie, then with an incision knife you shal cut & place crosse  
 wise, as as other do, & which is not so good after this man-  
 ner. Then take of the flesh, and make the fractured bone open  
 and bare. And if there followe anye sure of blood, you must  
 cleanse & wound with linnen clothes dypt in water and vi-  
 negar, or the white of an egge, and if there be no sure of  
 blood, fill the wound with drie lint, and dry clothes in bile  
 and wine, and applie it to the place, & binde up the wound  
 as thereto belongeth. Then if there followeth no accidents  
 which may hinder the cure of the bone, open the wound & let

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the patients eares be stopped with lint or cotton, & he hea-  
reth not, so making him faint hearted and affraid, let two  
men stay his head with their handes, and then with your  
knife depart the bone, or with the lenticalar. But if this  
cannot be done both speedely, and without great paine, then  
set a trappes, and bore it through so many times, untill it  
be separated from Cranium, and you shall take awaie this  
bone featured, first lifting it up with an ecrutaoie, untill  
you may take it a waie with your nippers, or fingers. While  
you must make the edges of the bone smooth and even, and  
after cure it in all cases as you cure wounds where Crani-  
um is featured, with the taking out pieces of bone.

*Of Wounds in the face, all Chap. 8.*

**W**ounds in the face are either in the fleshy parts, or  
if in the fleshy parts, the wound is either by force, or by  
if in the fleshy parts, and the wound is by force, you shall  
force stitch it with a fine small round needle and fine thread,  
but if it be in the fleshy part & by force, you shall in the place  
of a round needle use a square. If the wound be not in the  
fleshy part, then in any case you must leane off the skin  
in the place of it to ioyne the lips of the wound together,  
you shall doe in this manner. Take Sanguis draconis, Cal-  
cis ex testis quorum, Mastiches, as much as is sufficient, make  
in powder, and temper them with honie untill it come to the  
substance of honie. Then prepare two linnen clothes accor-  
ding to the length of the wound, and spread of it upon the  
clothes, and then brise either side of the wound apply a cloth  
and suffer it to drye. Then with your needle take your skin  
thru on both clothes, and while the wound is open, of the  
wound so even and right as may be possible, so, with things  
done, lay on the wound this powder following. Sanguis dra-  
conis, Mastiches, Albani, Gacis, et alia, and temper  
these in fine powder and temper them with the white of an  
egge, and lay it on to, and applye it to the wound. After  
you shall heale it with the same plaister, ointment, pow-  
ders, or balme, as you can find to be another wound.

woundes on the eye in cold rednesse, and that cannot be cured  
 with any oyle. Of wounds in the eye. Chapter. 11. In the  
 first touchings to the eye, about the eye are dangerous,  
 both for the nerves of the vision, and also for perill and  
 loss of sight; yea, it happeneth often by through wounds  
 about the eye the nature of optike have bene stopped, & there  
 have also followed sometimes a catarrh, which is then to be  
 looked for, when in the wound happeneth a the first ake of  
 the eye. Galen maketh mention of one sort in the whites of  
 the eyes, and much moisture doth come out, and yet the patient  
 refused to his sight. In like sort Doct. Brundwicke rehearse  
 the like historie of two children wounded in the eye, & much  
 moisture came forth; and he cured them with this water  
 following. But these cures are De iure contingentibus.  
 Rec. Aquarum ferri col. Rosarum, Polij, Eustagie, Rubea, ana  
 halfe an vnce, Albuminum ouinum q. s. These did he temper  
 and mire together, and applied it to the eye, as he affirmed, to  
 the great comfort; and restoring of sight to the child as  
 aforesaid. But I will gae to the cure of wounds of the eye,  
 which is without perishing of sight. If anie be wounded  
 through the upper or neather part of the eye, so that it hang  
 downe, then with a needle being bent crooked, aplice for the  
 eye, and a silke thread well waxed, you shall verie finely stitch  
 it vp, that the tumour of the eye maye be the lesse. And  
 put into the sight of the eye the water before mentioned, and  
 make a plaister of the white of an egge, Sangu. draconis,  
 and Frankensence, and laie it round about the eye, but be-  
 ware, it touch not the eye it selfe. Also you may heale it  
 with balme, but be diligent, none fall into the eye, & euer  
 use the water aforesaid, which is a wonderfull defensine,  
 and letteth accidents to come to the place; and thus shall  
 you perfectly cure the eye. And if the wound come to the ad-  
 join hearing, & wound you shall procure with oyle of roses, & if  
 anie thing be fired in the wound, worke after the doctrine  
 set out in that Chapter. And when the thing fired is out,  
 fill the wound with oyle of roses, tempered with the yolke  
 of an egge yanne, and nuttise the wound with Mel Ros-  
 saru, farina Hordei, & Fenogreci, after aplice incarnatives, &



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 heale the wound with the plaister used in greene woundes.  
 But if it be wounded with needle or thorne, use the man-  
 nificatine and defauser about the eye, and wash the eye with  
 this Colyrium following, untill he be healed. *R.* Boli ar-  
 meni, vnc. ij. Thulie, Sanguis draconis, Gummi arabici, ana. ʒ.  
 i. Make these in powder, and put it into a quart of good rose  
 water, & let that glasse in warme water three houres. Then  
 put to it Wine of Romaine, and let it remaine in the  
 warme water (& Alchimists call it Balneum Mariæ) a whole  
 daie, after straine it, and put of it morning and evening in-  
 to the eye. Also put on it this plaister following. *Rec.* Succ  
 Semperuiui, Solatri, ana. ʒ. iij. Boli armeni, Dragaganti, Myr-  
 rhe, Gummi arabici, ana. ʒ. i. Make that is to be brought  
 into powder, and dissolve the gums in vinegar, & make ther-  
 of a plaister, & if through channure there falleth into the eyes  
 haire, dust, moates, or such like, open the eye, and milke in-  
 to it the milke of a woman. Also it is verie good to use this  
 medicine plaister twice, as the other before mentioned. *Rec.*  
 Aquarum solatri, Semperuiui, ana. ij. vntes, Tutie preparati,  
 halfe a dram, Coralli rubei, Margaritarum perforatarum, ana. ʒ. ij.  
 Camphura, & graines, Dragaganti, Gummi arabici, ana. viij.  
 graines, Cerase lotæ, v. graines, Lactis mulieris, Albuminis  
 onorum, ana. ij. drams. Mixe these together and use it plaister  
 twice, as is aforesaid.

Of wounds in the Eares and Lips. In Chap. 10.

There is nothing in these wounds proper to it selfe, but  
 it is cured as other greene woundes, that is to say: First  
 wash it and lay thereon the powder mentioned before,  
 made of Frankensetre, Sanguis draconis, and yolk of egge.  
 Then about the place late some defension, and the next  
 daie apply oyle of roses and the yolkes of egges. After that  
 disse the wound with Mel rosarum, farina hordei, Turpentine,  
 Sarcocoll, and Opirhe. When heale it by Wiltie Baine, or  
 the plaister used in greene woundes, regarding all wayes it  
 needs require, & purge, let blood, boys and frowne, &c.

Of wounds in the nose. **Chapter.**

**T**he nose is sometime cut of, and sometime hangeſh by the fleſh of the lippen. If it be cut of, there is no cure to be bleſſed, for the hyganicke parts deſcribed, will not receiue vnition and ioyning againe together. If it hang by the fleſh of ſome other part, then ſtitch it aptly, and reduce the nose to his naturall forme. When put into the noſtrells ſents of wolfe, or Gole quilles, that y heau may both purge it ſelfe the better, and alſo that he may the eaſter dyab by the eye. And on the wound it ſelfe, lay the pouder here-after following. Then lay thereon the white of an Egge w ſolw tempered wth ſome of the ſoreſaid pouder, and after bynde and roule it, which thing that you may the eaſter and more aptly doe, let him put on his head a cappe or quaife, & ſolwe thereto your hande, and ſo may you procede in the curation of this wound, with the Balme or plaſter, bleſſed in grene and freſh wounds. The pouder applied to the ſeame of the wound, is this. *Rec. Thuris, Calcei ex tellis cumanis, Sanguis Draconis, ana. j. dragmes.* Mixe them wth the white of an Egge tempered wth oyle of Roſes, the deſenſine may be in this manner following.

*Rec. Succu ſolatri, Sempetruini, ana. vj. vnce. Olei Roſacci, iij. vnces. Boli armeni. ij. vnces. Aetii. j. vnce. miſcel.*

**A**n other deſenſine. *Rec. Vitellos ouorum. ij. Sang. draconis, Dragagani, Gummi arabici, Boli armeni, ana. ij. dragmes.* And if you would haue the ſkinne ſaſte, then you may lay on it this vnguent following.

*Red. Thuris, Myrrha, ana. j. vnce. Farina ſenogreci. iij. vnc. Refina. vj. vnce. Lutha giu aor. halfe an vnce. Olei oliuarum, iij. poud. Ceret. iij. vnces.* Mixe theſe, and make thereof an vnguent, and bleſſed as neceſſitie ſhal require, and the diſcrete Chyrurgion thinke convenient.

Of wounds in the mouth. **Chapter.**

The

**T**he wound of the mouth hath nothing proper to it selfe, but is scitche, defencible, misdeed, incarnated and cicatrized, after the maner of other greene wounds, therefore it neede superfluous to make a haire rehearsal of the cure & medicines, seeing it is plainly set out before, and medicines prescribed, which are thereto conveniently. *De rebus in the necky Cap. xiiij. De Wounde*

**W**ounds in the neck sometime are made in the fleshy parts onely, sometime in the ligaments, cordes, and nerves, sometime in the great veines, and arteries, & sometime in the passages, which as byth, meate and drinke, goeth in. If it be in the flesh, it differeth not from the cure of other greene wounds, but with scitching, pouder, balme, and other accustomed medicines, it is cured. If it be in the ligaments, cordes, and veines, take depe scitches in the fleshy parts, about the ligaments, cordes and nerves, and then cure it with oyle of ground worines, and the plaister bled in greene wounds. If it be in the great veines and arteries, there is great perill, through the great fluxe of blood, scitch the veines and arteries, & vpon them lay this pouder, which Galen used in the like great fluxe of blood.

*Rece. Eburis. vnc. Adoc. halfe an. vnc. Col. m. 2. 3. 4.*  
Take these in powder, & incorporate the with the white of an Egge, untill it come to the thickness of Honey, then put to it the haire of an Hare, and apply it to the wounded veines or arteries. Or you may use in place of it, this powder following.

*Rece. Colophonij. iij. vncs. Consolidida minor. Lapidis zomacit. Mastiche. Sang. Draconis. Ol. bini. an. halfe an. vnc.*  
Take these in fine powder, and use it as the other is afore. Afterward you shall in all cases cure this wound as is mentioned in the first booke of veines and arteries wounded. But if the wound be in the passages of ayre, meate and drinke, you shall scitch it, & use the pouder, & use it outwardly as other wounds; but inwardly you shall give the *Dia-*  
*simphi.*



Amphiton and Diadagantam, to lick with their tongue,  
and when the wound beginneth to digest, then mumble &  
decarne it with this medicine following.

Rec. Mollis Rosati colid. iij. vnce. Farinae Hordei. v. vnce.  
Terebenthina. iij. dragmes. Cera. Resina. ana. iij. dragmes.  
Thuris. Mastiches. ana. iij. dragme. Mirra. Balaocolla. Mustice  
ana. halfe a dragme. Olei Mastiches. iij. vnc. fat emplastrum.

Whether to haue the shewed the cure of wounds organical,  
which may happen in the first or vppermost ventricle. Now  
in lyke manner we will direct our pen, and set out the cure  
of wounds, which commonly channce in the second or mid-  
dle ventricle.

Of wounds in the brest. Cap. xliij.

**W**ounds in the brest either are without percing the  
tough the same, or else they are into the brest. If  
they be without percing into the body, they are cu-  
red as other greene wounds, with towe dypt in the restitue  
phloet, and layed to the wound, also with the lewes plat-  
ter, or the plaister attilloned in green wound, or else with  
Balme. But if the wound be percing through, then to be re-  
ther with blood falling inward, or hurt of some inward  
part, or else it is without flure inward, or percing of any in-  
ward member. Whom you shall by signes knowe if any of the  
inward parts be hurt, I haue set out at large in the sixt chap-  
ter of the first booke. As touching the cure of wounds in the brest,  
which are without hurt of any inward part, you shall in no  
wise tent the, but stich the wound, with staves dypt in wine,  
vnguents incarnatine, emplasters, & convenient rolling,  
heale it up, like another wound. But if it be percing through  
the brest inwardly, & some of the inward parts are hurt,  
then with all expedition you shall provide to bring  
out such blood & matter as is holden in the wound, & you shall  
put in a tent large & long, on which you shall strike oyle of  
Roses, & halfe a thred to the bend, that it goe not in, so put  
the patient to great paine. The patient must be layed vpon  
his backe, so that the wounded side, and the wound be  
well exposed, & the matter come out at the wound, & the  
of wine or Medullatum with a string, diligently marking

the quantity of the same as well as the quantity of the wound  
it sameth out, for if it be leke in quantity and colour,  
then you neede no more to make injections for all the mat-  
ter within contained is quite bogged at the wound: If you  
may boyle in oyle of Camomill, Lupines, Mel Rosarin, &  
Sparke, until the third part be consumed, then straine it &  
make injections with a string as afore, & then shorten your  
tent, and apply this mundification following, to the wound.

Rec. Mellis Rosati, halfe a pound. Mirrhay Thuris,  
Sarcocolla, ana halfe an ounce. Terebinthina two dragmes.  
Farina hordei Fenogreci q. s. fiat emplastrum.

Then you may giue him euery morning halfe a pinte  
of the potion warmed, which is used in these kinde of  
wounds, whose composition is in this sort.

Rec. Centaurij minoris Cossi, Nepite, Gariophillate, Pin-  
pinelle, Poloselle, Summitatum canabis, Cnabum rub. Tana-  
ceti, Rubie, Glycyrrhiz, ana. vj. dragmes.

Boyle all these together in faire running water, until  
the consumption of the third part. Then straine it, and put  
thereto of clarified Honney, so much as shall be sufficient to  
make the potion pleasant in tast. You must also giue here  
to liche, of Diaparmaticon, Diadragagantum, Dialimpitong,  
or Diacodion, all doe comfort and strengthen the brest. And  
when the wound is mundified, and the matter digested,  
then you shall heale it with the plaister called Diapalmatop  
Benitimum, and with this ponder following, using apt &  
conuenient colling, according to art.

Rec. Mastiches, Mirrhay, Thuris, Sarcocollz, Sanguis dra-  
conis, ana. j. dragme. Make then in fine powder, and thus haue  
I shewed you the proper cure of such wounds as may hap-  
pen in the middle ventricle, being not deadly and mortall,  
which do utterly refuse all kinde of curation.

Of Wounds in the third and lowest ventricle, called vlti-  
mae Bellie. Chap. xv.

There are properlie three kinde of simple wounds in  
the region of the bellie, according to which there is  
three diuerse cures. For either it is a small wound

not piercing through, or else it pierceth through, & so hath hurt of necessity some of the inward parts, but yet they come not out: Or else it pierceth through with hurt of the inward parts, by reason of which they come forth. You shall know what part inwardly contained, is wounded by their proper signes set out in the fifth Chap. of the first booke.

As touching the cure of these wounds, I will generally intreate. If the wound in the belly be but in the fleshy parts, without piercing through, then you shall stitch it, and heale it with Balsam, or the plaister accustomed in greene wounds, without further difficultie. But if the wound pierceth through Siphac and Myrach, and yet hurteth no other of the inward members, nor they come not out, then the cure of this wound shal be as is aforesaid in all things, except stitching. For in the first stitch, put the needle through the one lippe of the wound, but touch not Siphac, & after put the needle through the other lip, and through Siphac and Myrach, and make a knot upon the thred. In the second stitch, thrust the needle through the one lippe, and through Mirach and Siphac, but in putting the needle through the other lippe, you shall not touch Siphac but Mirach, and make a knot without, & so procede orderly untill the whole wound be stitched. And this is it that Galen saith, to sew Siphac to Mirach, because it is a nervous pannicle, and without blood it cannot of it selfe take consolodation. But if any of the inward parts, as the stomacke, Liver, Spleene, Intestines, or Bladder, be wounded, and yet by reason of the smallnesse of the wound, they come not out, nor cannot conveniently be taken forth, then you must with much wisdome and discretion, ampliat and make the wound larger, and if the wound be in such parts as are to be stitched, as the bottome of the stomacke, or intestines, then they shal be sowed as the Shimmers doe accustome over the hand, and put upon the seame this powder following.

Reci Olibani, Mastiches, Dragaganti, Gummi arabici, Ana i. dragma. Sang. Draconis, Momie, Ana. halfe a dragma. Milce fiat pulvis subtilis.

And then you may procede to the outward wounds and stiche



which it anhellet the thorne of the inward wound hang out  
at the outward wound; that as gallantly it doeth combat  
vats, so you may take away the thorne & apply to the out-  
ward wound this powder following. *Rec. Sanguinis Draconis, Oliban, Calcei & testis ononon,*  
*ana. halfe an ounce.* Make these in powder & use it as last time  
saide, and in all wounds of the outward parts, give the pa-  
tient woundes, the whole specified in the xiiii. Chapter of this  
booke. Also Clusters made with Sipticke wines, are more  
uicellously commended, in like manner to this posage of brath  
much commended. *Rec. Aquæ pluuiæ vel fontanæ.* For fu-  
ristrewnes. *Q. S.* Let these boyle one houre, then straine it, &  
put to it these powders following, and giue the patient to  
eate thereof, iij. or iiii. times a day, as you may prepare this  
brath made with a Chicken; if he be much infiebled & weake,  
& put of the foresaid powder into it, but if Zarba be wound-  
ed & corrupted, then saith Galen, let the black & corrupted  
parts be bound with a thorne or corde, & cut away all that  
is so bound, & after the stitching of y<sup>e</sup> belly let y<sup>e</sup> ends of the  
corde hang out, at the nether part of the wound. But if the  
wound be through percing, without hurt of some inward  
part, & coming forth of the same, then in this cure there are  
iiii. ententions to be obserued. The first is to put such parts  
in their proper places, as are come forth. The second, to stitch  
or sew the wound. The third, is to apply apt medicines. And  
the fourth is, that none of the inward partes suffer dolor, or  
tumour, but be defended from accidents. The first intention  
is brought to effect, if the wound be bigge & wide enough,  
that with soft & gentle handling, they may be put in their  
due place. But if by this meanes they may not be put in,  
either for the straightnesse of the wound, or else because the  
parts be swollen or inflamed, then you must work in this  
manner. What is to say, if the wound be so straight, that you  
shal enlarge it aptly with a conuenient instrument. But if  
they may not be put in, because the parts are swollen & in-  
flamed, then you shal labour with continuall fomentations  
to put away the same, which springeth for the more parts  
of coldnesse of y<sup>e</sup> parts. Take soft sponges, dip in warme  
water

water, & some the intestines, & after to use the wine strin-  
gend wine, which is much better then the water, and both a  
great deal more strengthen & comfort the intestines. The  
second intention is performed with soft and gentle hailling  
& compressing the belly, being certaine y<sup>e</sup> the members with-  
out, be rightly placed, then conveniently to sew & stitch up  
the wound according to arte. The third intention which is  
done by application of medicines, is to lay that comfortable  
pouder on the wound, whose description y<sup>e</sup> shewes in this  
chap. above. Also stukes with wine, incarnatine medicines,  
emplasters, & other convenient medicines & rolling, as are  
according to arte. The fourth intention of the cure, is done  
with soft wolfe wet in warme oyle, & laye it about the re-  
gion of the flanks, and giue him cisterns of Oyle, Wille, or  
Camomil: & also upon the wound it selfe, to powder of the  
same oyles, and apply emplasters, made with Fenegreke,  
Linseed, and Althea. Or you may boyle wine & salte, with  
as much flower as will suffice to make it thicke, and apply  
it as hot as he may suffer it, upon his rolling, and ouer all  
the parts that suffereth paine. And when this is colde, then  
use an other, and so doe so many times, untill the dolor and  
paine ceaseth. And as touching the matter, if any remaine  
within after the stitching & rowing of the wound, there is no  
great regard to be had, because nature both digest & resolueth  
it: & if there be any multitude, she sendeth it to the flankes,  
and then the cure of it differeth not from the cure of other  
apostumes, which happen in the flankes.

**O**f woundes in the bladder, and of the bladder. Chap. xvj.  
Woundes in any parte of the bladder except it be in  
the necke of the same, which though his belly  
ainger & swell will verie sub consultation) are inuincible. But  
those that are in the necke of the bladder, may be cured, & treated  
hauing the same cure that other great woundes haue. And may  
be cured by the use of the medicines of these parts, the medicines  
following. Rec. Mellis Rosarum, ij. vnces. Olibani, Malliches,  
Daigayanthi, ana. j. dragmes.

place the skin upon the wound, as it hath been mended, & doth also defend the part from accidents, yet if for the sensibillitie of the part, there happen great dolour and paine, ferment the part with oyle of Roses warme. And use in all other things, as in the cure of greene wounds.

Of the wounds in the parts called Armes, containing the armes & legges, and first of the wounds in the armes. Cap. xvij.

**T**hese parts named Armes, hath their beginning at the Shoulders, and so stretcheth unto the hands, and beginneth againe at Elchion, and extendeth unto the ende of the toes of the feete. The wounds in the arme, haue no peculiar cure to it selfe from other wounds, more then that the wounds in this part must haue the most surest & strong kinde of stitching you can deuise, because of the begynelle & ponderousnesse of the arme.

If the wound be in the fleshe, then cure it after the second Chap. of the first booke. If in the veins and arteries, then follow the methode set out in the second Chap. of the same booke. If like as if the nerues be wounded, or else the nervous places, as the ioynts, and brains of the muscles, the ligaments and tendons, and such like, &c. You must observe the doctrine contained in the fourth Chap. And if the wound be in the bone, you may vie the like curation, that I haue taught in the ix. Chap. of the same booke.

Further more, if the wound be both in fleshe, veine, arterie, and sinnow, then you must follow all the precepts set out in the ii. iii. & iiii. Chap. And compounde & mixe your medicines together, according as the wound is in more parts then one. And if after the cure of the wounds in the ioynts (as many times it happeneth) there are any knots or hardnesse left, whereby the ioynts haue not their free motion, then you shall take away this matter with this plaister following.

Rec. Lithargirij. iij. vneces, Muscilaginis fenogreci, Semini







heric tharve but yet much commended and is made in this  
manner.

Ree Gallani, Sagapeni, Opoponaris, Affafendi, Myrrhe,  
Pipenis, Sulphuris, ana. ʒ. i. Stercoris columbini, Anatis, ana.  
ʒ. ii. Calamintha, Mentalin, ana. ʒ. i. Dissolve the gums in

wine, and with hony and oyle make heretofore an emplaster.

Take also all the best and tender of the leaved and have it

open at the least for the paine, and pynne, and suffer to drawe

out as much as is possible, then rubbin the wounde

to be at drawen out, the yon shall with much ease have the

corruption, & medicines that are sicke and drawe the wounde

that you may not be get an oyle medicine, but rather

gallus heric called Alephanta, which of these is the

the best resist poison. Drawn which Galen is the best in

the best. Defecate this simplicium with wine, and

take this medicine following to be at most commendable

the against the bite, the men of the dollar and the wound

and the wound. Take the same Galen is the best in

the best. Take the same Galen is the best in

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## The third booke of the En-

dition. Setting out the removing of such accidents  
as happen to wounds: By Thomas Gale, Master  
in Chirurgie.

**N**OW that the pain brought to an end and  
the patient the more all out of weakness, as  
well in the flesh as also in the organick  
members of man's body; and thus he out  
of the body; againe they excellently also appo-  
inted to be used in the body of the patient  
when he is thus brought to the end of the cure of such  
accidents as are commonly fallow in wounds, either thro  
ough the nature of the wound, or through the blame of the  
patient, or also through the error of the Chirurgion. These  
accidents are called of the Greekes *Septies* & are humours & fe-  
vers, as when they happen in wounds, howbeit never cure  
the wound, they are dangerous to the patient, and the most  
commonly happen in the wound, the most part  
are these following: 1. This is to wit, inflammation, of  
temperance, a fever, puritis, abscession, & paine, dropsy,  
& alienation of wits. Of these is to be noted and remembred as I  
can, I will first treat of inflammation, which is to be re-  
spected on the place in which it is, where the wound  
is, and cannot be cured. And first we will begin with that  
accident which is called *Septies* or paine in wounds. And  
it is to be noted in general, as in the beginning of the

Of colour in wounds, and the swelling of the  
same. Chapter.

**T**his accident, called colour, paine, or griete, bringeth a  
flux of humours to the wounded parte, & stirreth most  
grievous accidents, as phlegmon, other wise called inflama-  
tion, Apoplexies, & such like, yea, & that in those bodies which  
are pure and free from humours; therefore with all dili-  
gence you must labour to reale the colour, or at least, to miti-  
gate it somewhat, applying to the place somentations  
with

with oyle of roses warmed, mixed and tempered with the white of an egge. But if the paine be so vehement, that with this medicine it will not be mitigated, and that you are constrained to vse some stupefactions, you shall make your fomentation with oyle of Popple, and if great urgent cause constrain you, you may adde a little Opium to it, or oyle of Mandage. There are other who do much commend this emplaster following. Rec. Radici Solani 3. in Foliorum malur. m. Furfuris tritici, ii. 3. Olei rosacei q. s. ut emplast. Also other do applie to the affected part an emplaster made of bread or wheate flower boiled in milke and some oyle of Roses. And these cease the dolour and paine thro wales, both in resolving some part of the matter gathered by reason of the fluxe, and also in alluaging somewhat the vehemencie of the paine by the qualitie of the medicine. But of the medicines which do alluage and cease dolour, you shall haue it more at large set out in the Antidotarie.

### Of Inflammation and Apoplexie. Chapter. i.

**T**hat which the Grekes call Phlegmone, we usually tearme in our language, Inflammation, and is no other thing than a vehement heate stirred in any parte of the body through the force of the humor flowing to the part. There are foure intentions to be followed in the cure of an inflammation. The first standeth in the right order of Diet: the second, in ceasing the fluxe or diuersion of the antecedent matter: the third is an euacuation of the matter collected and now impact in the part affected: the fourth standeth in the correcting and putting awaie of accidents. The first intention is fulfilled in the right vse of the five things called Non naturalis, as in the purenesse and temperatnesse of the aire, the meate and drinke, colde, moiste, and smal To sic exercise, and to vse quiet and rest of bodie, To vse moderatnesse in sleeping and watching. To beware of surfeiting, and laying (as they saie) gorge vpon gorge. To keepe alwaie the bodie soluble & loose. To sic all vehement perturbations & affections of the minde, as anger, contention, chiding, & such

### The third Booke of

like. Last, you must abstaine from Venus service, as for the greatest penitence that may be in this disease. The second intention, which is in easing & direction of the matter that groweth, is by opening a vein in the contrarie side, if y<sup>e</sup> age and strength of the patient can suffer it. Also applie medicines to repell and drive back, among which Galen praescribeth Oxycanon (that is) water and vinegar boyled together, and foment the place with a sponge dypt in it. Also you may boyle in some astringent wine the rinde of a pomegranate, & foment the place therewith. Dyeste applie to the place inflamed Cataplasme, which Galen in his second booke of Gladecorene doth so much commend, whose composition is in this manner. Rec. Sempervivum, Malicorni, Sumach, ana. ʒ. iij. Boyle this in wine till it come to the forme of a Cataplasme. Also Auicenna in his 3. ʒ. in 4. booke. First Booke Chap. 3. describeth another of much efficacie. His composition is in this forme. Rec. Succi Sempervivum, iij. pound, Vini nigri half a pound, Farinae Hordei ʒ. iij. Malicorni, Sumach, ana. ʒ. ʒ. Boyle these and make therof an unctiō, but if you boyle these, you must make the Malicorium and Sumach in powder. The third scope in treating, that is collected in the beginning of inflammation, is done with repulsive medicines, and to mixe with these such as doe digest the matter, among which this is one.

Rec. Rosarum, Florum camomillae, ana. ʒ. iij. Sape, ʒ. ʒ. Aque fontane, one pound and a halfe. Boyle these and make an emplaster of them, but if the inflammation be in Augmento, then you shall mixe with your digessive medicines that repelle and letteth the fluxe. But when the inflammation is in Stasis, then mixe with the repulsive medicines, medicines that doe somewhat intrinsicallye drye of excoce. Also you may use this emplaster, which in this sorte following is described. Rec. Paridinae, Malice, ana. m. j. Forsulis, Farinae volatilis, ana. ʒ. i. Fenogreci, Maachi, ana. j. ounces, Olei camomillae ʒ. iij. Boyle all in wine till they come to y<sup>e</sup> substance of an emplaster. There is also another excellent plaster which Galen describeth in the beginning of an inflammation, who is thus made. Rec. Medullae panis frumenti, one pound.

Let



Let it steape in hot water for the space of an houre, and then straine it, and put to it Mellis communis. Take of these an emplastrer, and applie it to the inflammation, but if the inflammation be as they call it in Declinatione, you must onelsteble medicines to digest, which maye euaporate the matter remaining: if y inflammation doth end by euaporation or dissolution. But if it turne into an Abscessus, then you must use medicines to suppurate, to open, & to mundifie, of which you shall haue a large discourse in my booke of Tumors against nature, and also in my booke of curing vicers. The fourth scope of removing, or rather defending the inflammation from accidents, as holour, Feauer, Abscessus, and such lyke, requireth diuerse and sundrie remedies, which because they be accidents also chancing in wounds, I will intreate of them in their proper Chapters.

### Of removing and taking awaye discomperance in wounds. Chap. 3.

**T**hat discomperance which happeneth to mans bodie, whether it be hot, cold, moist, or drie, or elle compounded of these simple, Galen and all the Grecians comprehend vnder the name of Discrasia. Of which, if to the wound there commeth a hot disposition, which you may easilie coniecture by the great rednesse and desiccation, you must infrigidate the place, not with Herbane or Mandrage, but rather with Roes, Plantaine, and Vnguento albo, which doe as well desiccate, as moderatelie make colde. But if the discomperance be colde, which you may iudge by the softnesse and Leadie colour of the skinne: you shall put these awaye by medicines contrarie in qualitie, which doe moderatelie heate. So y you may not applie Rosen, Witch, or Asfaltum, but Wine, Vnguentum nigrum, or Fulcum, or Basilicon. So in lyke manner if the wounde be too moist or too drie, they must be cured by their contraries. And here is to be noted, that if the discomperance be in heate and moisture, or else in heate and drynesse: in colde and moistnesse, or else in colde and drynesse, then

## The third Booke of

then your mentioned vices in the simple of temperance, may be mixed together contrary to the compound distemperance.

### Of convulsion which happen in Woundes.

#### Chap. x.

**S**pasmos, which we call convulsion, is no other thing than a depravate motion chauncing to the voluntarie facultie of moving through sickness. Convulsion chaunceth three sundrie waies, by repletion, by inanition, and by societie or participation to the braine. The generall methode in curing these three sorts, is to holde stronglie, and to chase and appoint them with oyle of Lillies, or elle with common oyle in defect of it. The convulsion springing by inanition is cured in this manner. First, loment the place with oyle, or els with Hydzeleum made warme. Also if no other thing be let or impediment, you shall use a bath in which is boiled the head and feete of a sheepe, goat, calfe or lambe. Also in which is put Mallowes, Althea, Violet leanes, Beates, and Percurie, putting to it the third part of oyle. Some there be which with great profit do use this liment following, appointing with it the ridge bone or spine of the backe, and all theiopintes.

The Liment. Rec. Olei violarum, ℥. iij. Amygdalarum dulcium, Pinguedinis Gallinae, Medullae crurum vituli, ana. ℥. vj. Pinguedinis vituli, Hedi, ana. ℥. x. Boile all these in the decoction of Mallowes & roots of Althea, unto the consumption of the sayd decoction, then straine them and make a liment of them, and use it as I have aforesayd. But if the convulsion come of fullnesse, you must cure it by evacuation of the whole bodie. But ther be two waies to evacuate, that is to saie, by letting blood, & by purging. But we let blood in those bodie in which there is abundance of blood, or els where inflammation hath caused convulsion, although there be no abundance of blood. But if the fullnesse be of humours, then you must purge & which both offend, whether it be choler, or melancholy, but grosse & viscus humours are to be expelled with Hiera, Hiera, & Agarike. You must also

also vse sharpe clifters, also gargarismes, apophegmatismes and nésing, y the grose steame may come forth by the nose and mouth. The body being thus purged and let blood, anoint the neck, armes pits, and flanks, with this liniment following.

Rec. Oleorum lilacei, Costini, Spice, ana. ij. vnccs. Laurimi, Castorei, Euforhij. ana. halfe a dragma.

Mixe these together; and vse it as before saide. Also Rogerius and Theodoricus, doe much in this sickness praise the vnguent, whose composition is in this mater.

Rec. Olei muscellini. j. vncc. Petrolei. halfe an vncc. Olei communis. Butyri. ana. iiii. ℥. Styracis calamitæ. Rubræ. ana. ij. ℥. Mastichas, Olibani, Gummi hederæ. ana. halfe an vncc. Cera. an vncc.

Mixe these in an vnguent, according to arte, and with this vnguent moderately heate, anoint the whole necke, & all the spine of the backe. Last of all, if the conuulsion cometh by consent and societie of parts, and springeth of dole, you must cure it by medicines called Anodina, of which we haue made mention in the first chap. of this third booke, & also in our Antidotarie. But if it appeare by the biting of any venemous beast or serpent, you shall apply bores to the wound, and make a plaister of Triacle, & lay to the place, and vse the same methode of curing that is set out in the last Chap. of the second booke. And if conuulsion insueth, because sharpe and corroding humours doe bite & fret the mouth of the stomacke: then with all diligence you must prouoke him to vomit, and after strengthen the stomacke both outwardly and inwardly, with apt and conuenient medicines, following the counsel of some expert Physician. Furthermore, in all conuulsions, this is a general rule, you must strengthen and corroborate the braine. Wherefore shauing the haire, you shal somet the head, neck, armes pits, flanks, spine of the backe, & ioynts, with oyle of Almonds. If these doe not take place, the according to Galens doctrine, you shall cut the nerue a sunder. For (saith he) it is better to suffer hurt and losse of one part, then to looke for a certaine and ineuitable death.



## The fourth Booke of

Of the Palsey coming of a wound. Cap. vi.

**P**alysis, which we in English call the Palsey, is the relaxation and molifying of the nerves, with losse of feeling and moving of one side or part of the bodie. This accident sometime followeth vehement convulsions, and chiefly after great woundes in the head, and in the spine of the backe. It doeth shew forth this might. The cure of the Palsey is in this wise. First you must evacuate the bodie by purging of the humours, and evacuating the bodie. Pea by letting of blood also, if necessitie requireth. Further to direct the fluxe which goeth to the resolved part, being also a convenient oyet, in all which it is necessary to consult with the learned Physitian. These things being done, then let the Chirurgion with diligence apply locall medicines, among which many doe use Emplaisters, Cataplasmes, Unguents, fomentations, boryng, and divers other remedies. But Guido (out of Mesue) hath chosen a most precious liquer, and against this accident of most wonderful effect, with which he annoynteth the spine of the back, the necke, and the part resolved, and surely there is no remedie comparable to it. Pea, and Guido leaving all other medicines, helpe him selfe wel satisfied and pleased, onely with this so precious a treasure. But I will omit the praise of so noble a liquor, seeing my woyt is to simple, & my penne to rude to doe that herein is required, and therefore I let that passe, and wil shew you the composition.

Reci Myrthe electæ, Aloes hepaticæ, Spicæ nardi, Sanguis draconis, Thuris, Mumie, Opoponacis, Bdellij. ana. ij. ʒ. Carobalsami, Ammoniacki, Sarcocollæ, Croci, Mastiches, Gummi Arabici, Styracis liquidæ. Ana. ij. dragmes. Ladani electi, Succu castorei. Ana. ij. dragmes. sc. Musci, halfe a dragme. Terebinthinæ optimæ ad pondus omnium.

Beate all those to ponder, that are to be brought to ponder, and mixe all these with the Turpentine, and put them in a

in a beſſell of diſtillation, and with a ſoſte and gentle ſeye  
drawe out this moſt precious liquoz, and if to this compoſi-  
tion you dyd adde ſuch beeches as are vſed in curing the  
Walley, you ſhould make your medicine ſo much the more  
precious.

Of Syncope or ſounding, through cauſe of the  
wound. Chap. vi.

**C**ALEN in the twelfth booke of his Therapeutike  
methode, ſayth; that Syncope is a ſodaine decaye of  
ſtrength, comming through immoderate euacuation,  
vehement dolour, continuall watching, intemperatenesse of  
the principal parts, or vehement perturbations of the minde.  
But Syncope which followeth in wounds, ſpringeth for  
the more part, of great effuſion of bloud, or elſe of vehement  
dolour. And you may eaſely coniecture the comming of it,  
by the weakenesse, pulſe, paleneſſe of face, colde ſweates a-  
bout his neck and temples. And this accident is not light-  
ly to be regarded, becauſe it ſuddenly cometh, and is as it  
were the image of death. Therefore comfort the wounded  
man by all meanes poſſible. ſuffer no great companie to  
be where he is, and before this accident come, give him a  
peſe of fine white bred ſopped in y<sup>e</sup> beſt wine you can get,  
into which wine you ſhall put roſe water, bozage water,  
and a cake of Manus Chriſti perlati, and after you haue toa-  
ſted of the bread, give him of y<sup>e</sup> wine to drinke, and comfort  
him with ſweete ſmelles, and chaſe his temples with Roſe  
water, and if he begin to ſound, caſt colde water on his face,  
and chaſe and rub his temples with your hands, pull him  
by the noſe, exclaine and call him loude by his name, rubbe  
his hands, and pull him by the eares, and doe what you can  
to reuine and quicken his ſpirits, as is the cuſtome of lear-  
ned Phiſitions.

Of alienation of the minde comming by reaſon  
of the wound. Chap. 7.

Delyrium

**D**elyrium, or alienation of the minde, is a motion dep<sup>re</sup>ssate, of the principal facultie: taking his beginning of euill fumes ascending to the head, and also of intemperatenesse of the braine: it both diuers times fortune the braine to suffer of it selfe, and sometime by consent with other parts. But I will speake onely of that alienation of minde, which cometh by consent of parts: Wherefore if that alienation of mynde apprehendeth the patient after he be wounded, you must cal some skillful Physicion, which with position, frictions, binding of the hands and fete, sharpe elixers here to apt to attract the fumes and vapours from the head, & when the vigour of this accident infesteth, it is good to poure on his head, the decoction of Poppie. For Galen saith, we must labour to abtaine somewhat the braine, and prouoke sleepe by all meanes possible. Auicenn saith, that many haue bene deliuered of this accident, by vsing certaine dayes, the decoction of Bylonie rootes. And thus I haue set out the most notable and perillous accidents, which happen in wounds, with their intentions, curatiue, and proper medicines used in the same. Wherefore I thinke it good here to finish this third booke.

FINIS.

## The fourth booke of the

Enchiridion, comprehending the maner of curing fractures, and luxations: by Thomas Gale, Maister in Chirurgie.

**S**ing I haue hether to in their proper books set out the cure of all those wounds, which may happen in the softer parts of mannes bodie, as in the flesh, muscles, veines, arteries, nerves, tendons, ligaments, and such like: and haue further shewed sufficiently the methode to put away such accidents as happen to great wounds (for to great wounds cometh great accidents) time now



words belongeth me by the name, and faith, direct the penne, & adreſſe the to myſte of theſe woundes, which happen in the hard parts of mans members, that is to ſay in the bones. Such be thoſe woundes which are called fractures or breaking of bones, in Greke Catagmata, and alſo of lurations & diſlocations of the ſame, which becauſe both are affections conſiſting to the bones, I will myſte of both in this fourth & laſt booke of this Enchiridion, beginning firſt at the fracture of bones, which done, I will alſo intreat of diſlocation.

Of the true and perfect cure of bones fractured. Chap.

**B**Efore I doe take in hand to intreat of the cure of bones fractured, I will ſet out what a fracture is, that thereby it may be the better underſtoode, that hereafter ſhalbe myſtten. Wherefoze a fracture is a ſolution of continuittie, made in the bone. Of bones fractured, there be three differences. One when the bone is broken in length, another when the bone is fractured overthwart: the third, when as the fracture is oblique or crooked.

Albucaſſis, and other latter myſters, make the differences of fractures, not according to the bone fractured, but after the place affected, as if the noſe be broken, or the braine paine, or jawes, rybbes, backbone, armes, thighes, legges, fingers, or other part: which in verie be not differences of fractures, but as I ſayde, of the place affected, according to the nature of which, the bones broken, have ſpedier or longer time or they can be united again together. For the Cranium is united together in xiiij. dayes, the arme or legge in the ſpace of li. dayes, the ſcapules, aboute xxx. dayes, the noſe taketh verie conſolidation in xviii. dayes, the rybbes in xii. dayes, the jawes, the bones in the handes, and feete, aboute ii. dayes. And ſo in like ſorte is to be ſpoken of the time of curing other bones fractured, according to their natures, alſo the time may be longer or ſhorter, according to the age of the patient, time of the year, over & under of ſeaſon. All which muſt be diligently conſidered of him that will appoint

point any thing determinate in curing of bones. But after  
to have a new fracture of bone fractured. But by reason  
the fracture is a solution of continuitie, there is required  
the uniting againe of the same. But to the solution of the  
fracture are required foure scopes or intentions.

The first is that the parts of the broken bone be  
rested, and put together in their proper place. The second in-  
tention is, that they being so reduced to their naturall forme,  
they be conserved and kept, without motion.

The third scope is, that the partes of the broken bone  
may be conglutinated and joined together, by engendering  
of Callos. The fourth and last intention is, to correct those  
accidents, which doe come after the fractures of bones. Of  
these foure scopes & intentions, according to my poore know-  
ledge, I shall severally intreate.

How the parts of the bone fractured are to be united  
together and put in their proper place. Cap. II.

First of all it behooveth to note diligently, whether the  
bone broken be out of the naturall place or not, which  
you shall know by these signes, lately Cornelius Celsus.  
For if the member where the bone is fractured, both exten-  
d it selfe and stand forward, and is with pricking, and when  
it is touched, it sheweth an inequality. These be sure in-  
dices and signes that the bone broken, is out of his naturall  
place, wherefore after the counsell of Guydo de Caulhaco, the  
member is decently to be extended, & that parte of the bone  
that is depressed, is to be lifted up, & that other parte which  
is standing forward, must be put downe, and this with so  
much lenitie and small paine as is possible, untill the ends  
of the bone fractured doe meete and be united and brought  
to their naturall forme and place. Neither is this possible  
that the bones fractured and brought out of their naturall  
place can be reduced & rightly united and placed, but with  
some force, more or lesse. So that if the member be small & of  
no great strength, as a finger or other like member, one man  
may well extend and stretch it out, applying his one hand

on the one part, and the other hand on the other part of the  
broken bone, until both ends of the bone fasteneth, so made  
and loyned together. But if the member be great, having  
strong nerves and sinews, then one man is not sufficient,  
but there is required two: specially where a fracture cometh  
in the thigh, legges and armes, of strong and robust  
persons. But you must diligently take heede that the mem-  
ber be neither so desperately, or unmoderately extended and  
drawen out, for that doeth bring (specially in hands and  
byes bodies) vehement colour, fevers, convulsions, & some-  
times the palsy. Yea, it happeneth often by this meanes,  
that the fibres and threads in the head of the muscles be  
broken. Wherefore there is much wisdom and discretion  
herein to be used. But now to that from whence we are di-  
gessed, first the sicke man is to be set in a chaire, or else  
if it be more convenient, layed on his back on the bedde.  
Then the men for this use prepared, you shall commaund  
the one to holde with his hand the part of the member a-  
bove the fracture: and to the other, to laye his hand on the  
nether and lower part of the member, under the fractured  
bone. And this being done, willing them so long to stretch  
and put out the member, until both ends of the bone doe  
meete, then they with the hands shall suddenly firme it  
and put it in together, laboyling to bring it to his naturall  
figure and forme. But if the member be such as that with  
their hands onely, they are not able to extend the same, then  
you must have one of which the one shalbe fastened above  
the broken bone; the other under: and to the one man plac-  
ed at the sicke patients head, and the other at his feet.   
They shall stretch and extend out the member as in the first  
ent with the hands in their hands.   
And this is a sufficient token that the bone broken is  
reposed in his right place, and that both ends be united to-  
gether: when that the patient feeleth a releasing of his  
paine and colour.   
The bones being thus loyned together, leaue that they  
should growe sounder againe, it is necessarie to rolle & bende  
it in such wise and manner as shal here after be set out.

And



Now if it be found that the broken bones be not united but remain out of their place a few dayes, then accidentally folloiweth great inflammation, and no small perill and danger to the nerves and tendons. And thus briefly and insufficiently I have set out the first intention, which is also an incontinent step to extend out the member further which Hippocrates and Paulus make no mention; which you may prepare and see, but I omit it, and take the way, above said, as more apt and without perill.

Now the broken bones united and ioyned together, they apply, may be kept and remaine in the same figure, so that they may come to their former estate.

## Cap. iij.

**W**hen as the broken bone is reduced to his right place, and is set in according to his natural figure, it is very expedient to keepe it in the same, which cannot be in any wise if, that the member be moved. Wherefore it is necessarie by all means possible to keepe the members without motion. Which thing although the patient perhaps in the day time will carefully regard, yet at night when hee sleepe with uncopie his senses, be that of senses neglect. Therefore that as well day as night, sleeping or waking, the member may be conserved without motion, it shalbe necessarie, to use apt & convenient ligature & rolling. But before you bee gone about to rolle the member, it is very good to mixe the white of an Egge with oyle of Rose together, and wet therein a soft linnen cloth of such bignesse as may compass not onely the place where the bone is fractured, but also somewhat of the sound parts. Then this being applied to the affected part, you shall next bynde and rolle the member, in which you must diligently regard that you compress not the member by too hard rolling, and so the movement cannot come to the part, and also labour and paine may cause flux of humours and inflammation; neither must you bynde it to flacks and loole, for then the broken

broken bones will separate againe and go in sunder. Ther-  
fore you shall vse one meane herein, that you chuse not the  
member too straight nor too loose, but follow herein both your  
owne discretion and also the feeling of the patient. And as  
touching your rollers, you must haue two made of soft cloth,  
whose breadth & latitudo must be such, as in rolling there be  
no loosenesse, widenesse, & plaits: the length of these cannot  
certainly be shewed, but must be according to the largesse of  
the fracture, & thickenesse of the member. The beginning of  
the first roller must be vpon the fracture, & so rolled about  
iii. or liii. times, & the rolling vponward untill you come to the  
sound parts which must also somewhat be rolled. So by this  
meanes your bones united shall more firmly remaine together,  
& the Surge of humours raised & they cannot come to the affected  
parts. At the beginning of the second roll must also be put vpon  
the fractured place, going also liiij. or liii. times also about the  
same, & so continuing downward untill you haue compassed  
the sound parts, which done, you must with the same roller  
ascend vponward againe untill you come somewhat above the  
first roller. Wherefore this roller must be half as long againe  
as the first roller is. The vtilitie of this second rolling is, that  
it putteth the superfluous humours into the lower parts, & suffereth  
not anye store of humours to infect & mowe the part affected.  
These rollers should be wet in water and some mixed to-  
gether before you vse them. And if there be anye vhe-  
ment paine or inflammation, then the member should be wrap-  
ped about with fine linnen wel washed, or else with staves wet  
in Oxymelle, & the bandage or rolling incontinent be hard,  
but such as maye defend and keep the united bones together.  
Furthermore, because these bandages and rollings are not  
onlye good to defend the member from accidents, and also to  
keepe the member together, and to comfort the same, Hippo-  
crates teacheth vs, plaisters & cataplasmes, as suchlike, which  
must be put vpon the roller as it were, & thirdly, sig-  
nature well knowne, which is such. Grosse humours made of  
spice melted in wine or oyle. But if there be inflammation  
herein, the solution also is continuall in the flesh,  
then you shall not in any wise use either oyle, or oyle, or  
well

## The fourth booke of

cause it will make the blood sticke and stinking. But in  
 their place to use Plasmactols that be long, distillat and  
 driptlike iuine. And one thing which keepeth the member fro  
 dolour and paine is, after that the same is rolled and aptly  
 put together, to place it in his naturall forme; so nere as  
 you can, & it is most nigh vnto the naturall forme & figure,  
 when it is so laide, as is with least paine and gilete, but be-  
 cause this forme & figure should be shortly considered & kept,  
 and accidents put auaie, the later Chirurgions haue often  
 to put about the ligatures certaine splents at the first dress-  
 ing; binding them so about the member, as the patient or  
 accidents may suffer. Galen and the olde writers did not  
 splent before the seventh or ninth daie, notwithstanding it  
 is convenient to use the splents at the beginning, so y they  
 though binding compress not the member, and make do-  
 lour and inflammation. The splents must be equal, smooth,  
 even, not crooked or ragged, and in the middle thicker than  
 in the other parts, that they may be the more able to strey-  
 then the member in that place where the bone is fra-  
 gred. The way and order in applying splents is thus to witte.  
 Where must be clothes staid by four or fide vnto the foot  
 ter, and laide upon the rollers; according as the member re-  
 quireth. When the splents inuolued, and wound about with  
 wooll or cotton must be placed round about the member  
 good breadth a finger, & bind them moderately and gently  
 you compress not the member, and in this case take heed  
 make of the splents touch anye voynt, if any be nere the frac-  
 tured bone, so that will make ulceration and inflammation in  
 the same voynt. Therefore if the fracture be nere to anye  
 voynt, you must in y part make your splents shorter, thin-  
 der, & tighter, and if no dolour or inflammation is feeling, no  
 ulceration cometh to the fractured part, then you may let  
 the splent remaine on, vnto the fifth day, or to the sixth, or to  
 the seventh, but if any of these happen, then it shall be  
 convenient to unroll the member the third day, and to re-  
 dress it with newe splents, & to change the splents  
 along with the wound, & to change the splents  
 with the wound, & to change the splents  
 with the wound, & to change the splents



shall to yonged shall be ad iun dum nulla. To yonged ad iun  
 and the parts of the bones broken may be conglutinated  
 and ad iun dum together. Chap. 4. ad iun dum ad iun  
 ad iun dum ad iun dum ad iun dum ad iun dum ad iun dum

**S**eeing that the fractured bones cannot be conglutinated  
 & made to grow firme together, neither by apt and  
 convenient rolling nor splenting, nor by putting of them in  
 their naturall forme and figure, except there be made some-  
 what to grow apt of the nourishment of y bone, which may  
 cause them to close and grow together, they call this Callus;  
 which like a glew doth glew them together: therefore y this  
 intention is to make this Callus to growe by all means  
 possible; but this must be engendered of grose & eatible parts;  
 such is the nourishment of the bones. This Callus after the  
 munde of diuersite, do begin to grow about the tenth or thirte-  
 date. And that it doth begin to growe you shall perceiue  
 and iudge by those signes and tokens. The colour & paine  
 is allwaged, the inflammation ceaseth, the tumour vanissheth  
 awaye, the naturall colour of the member cometh againe  
 to the same. And for that the chiefe and principall waie to  
 make Callus grow and ingender, standeth in apt and con-  
 venient diet, I will hereby offer the same unto you. Al-  
 though at the beginning of the fracture Hippocrates coun-  
 sellet that the patient doe use a thin and small diet, & that  
 he doe abstaine from flesh and wine for the space of x. daies:  
 yet now when our scope is to ingender Callus, you must  
 license him to use a more large diet, and meates that make  
 good iudce, & that grose and somewhat viscons, for of such nu-  
 triment bones are nourished & Callus groweth. Therefore  
 they recommend morthine and pure wheate boiled in cleane  
 fontaine water while the wheate doe hurst, and the water  
 beinge so concocted is somewhat thicke. They call this with  
 vs in England, Frumentis potage, and I suppose it to be  
 that which diuerse call Allica. Also the heads & feet of beastes  
 are verie good in this case, chiefe of a kid or else a weatber,  
 for these doe much nourish, and be of grose and viscons  
 iudce. Also giue him to drinke good redde wine when as  
 he goeth to his meate, but let it be moderatly taken.

The bignesse of Callus must not be either bigger or lesser than is requisite, for being bigger or lesser it bringeth paine to the muscles, and if it be lesser, then it is unable to defend and strengthen the fractured bones. Now Callus shall be that it be neither too big or little, you shall see set out in the Chapter following.

How the accidents which happen to fractured bones are to be removed and put away. Chap. 5.

This fourth scope and intention, although it be the last in order, yet is it not the least in vertue and use, for it doth shew how to remove all accidents and things against nature, which both let and hinder the curing of the fractured member. Such accidents for the most parte are dolour or paine, inflammation, itching, a wound, immoderate drynesse or moisture, letting & hindring the generation of Callus, Gangrena, hardnesse, & the quantitie of Callus too much or little. These, as I haue, be the chiefe enemies to hinder nature to cure, and I will set out the waie to expell and put away euery of them, beginning first with the accidents called dolour or paine, & with inflammation, named of the Grecke and Phlegmone. Therefore if these accidents do infect & besiege the fractured member, after it be bound, rolled, & dressed, you shall with speed loose the ligature & take away the roller, and then the member being bare and naked, you shall foment it with oile of roses, vineger, & with other like medicines before remembred in p. 3. booke, toher I writ particularly of the cure of these accidents. Neither shall you vse again either ligature or splints before the dolour be allwaged, & the inflammation ceased, except it be onely to strengthen the member and keep it together. But these accidents being expelled, then vse splintes and rolling as you did before. But if this itching, or as they call it in Latine Pruritus, with fantasies or matter happeneth, then Hippocrates and Galen used to foment the place with water temperatly hot. And the later Chirurgions in the like case doe apply salt water, coquendum album, vel vinquentum Populeum, and binde the member, as is aforesayd. Furthermore, if to the fractured member









Case and Place



The













Defensive you shall every day have lost, with vinegar and water. So that you shall not need often to remove it. In like manner you must wet your first dressing that was laid under the skin and to keep it wet, for the space of five or seven days before you remove it. And for as much as we cannot come to a finger, or a toe to take it off with a saw, as we may doe a legge or an arme, therefore I have devised pinions to nippe the bone a lunder after that you have cut the flesh round about to the bone, with your incision knife, mingling your powder with the white of an Egge, for the restoring of blood, and other defendines, to defend humors, as I have before alleaged.

Now for the rest of the cure, as it we must proceede with medicines to caule the alker to fall off, and I have founde none better then this following.

Rec. Terebintina. ij. vncces. Butiri recentis. iij. vncces. Cere. one vncc and a halfe. Vnguent. populcon. viij. vncces.

Make hereof an unguent according to art. This unguent both not onely loose the alker, but it coaleth the great paine, and keepeth the member from euill accidents which is requisite in this manner of cure. I have not knowne two ye, that hath had their legges or armes taken off with this powder aforesayd, & using the methode or way that I have here before declared. And for the rest of the cure, you may use medicines incarnatiue and dekeratiue, as you doe in other wounds, and as is required in the arte of Chirurgerie. Now my brethren, for as much as that the taking off of members, is one of the principall things that you haue desired of me, and to doe it without actual cauterising yrons, which for many ye hath the people with the scruple of cauterisation or burning, as we call it, that many of them rather would see with the member on, then to abide the terrible fire, by means whereof many people perished.

And other some that put themselves to surgerie and had their legges or armes taken off with hot yrons, many of the perished, as you your selues knoweth right well. And specially you that be of the Hospitallies of London: wherefore I haue devised and compiled (by the mercurial helpe of

God),

God) this manner and way to cure these miserable afflicted people without any great pain or great peril of death. And you your selves have had experience now of late time, by the dismembing and taking off, of many members, to the great reliefe and comfort of the poore people and to the great honour of the noble arte of Chirurgerie. And I trust also, being thus maintained, it shalbe highly to a glorie of God to the commendacions of this noble Citie, where as these charitable dones are done, unto the poore afflicted members of Iesus Christ in the Hospitals of London, where as daily these workes of mercede are done.

Now bretheren I haue opened vnto you this noble ponder, which I haue inuented to your honour and profit, but chiefly for the commoditie of the poore: requiring you, for as much as it hath bene your owne desire, to haue the making of it, to take it in good part & giue God the chiefe maker thereof, thankses therefore, and vse it well. For I haue hard say of a late time, that there is some that saith, they haue the same ponder, and maketh a moche and a gaude of it, going about to belace me the author thereof, for my good will and painefull diligence. But I warne thee (what so ever thou art that so saith) to hold thy tongue with silence, for neither thou nor I had it, but now of late time, inuented by me and one Maister Pickpore and first put it in vse, and made by the Surgeons of Saint Thomas Hospital in Southwarke. And since that time put in vse of many moe, both young and olde, not onely in taking of members, but in restraining of blood, both in veins and arteries, which could not be done with hot yrons, and many other things hath bene done with this ponder, which is more to be marvelled at, the to be belaced. And I for my part haue read no small number of authors, and that of the best, and yet I neuer could finde this ponder in any of them all. And if any other man be able to thorn it me in any other author, then I will giue him place, or else holde thy tongue, as I haue said before, for if thou or any of us all had had this ponder, we had shoued our selues enel members in a common wealth, that should suffer so many poore people to per-



also in the Hospitals, and in many other places, for lacke of  
helpe.

And thus brethren to certifie your request, I haue be-  
named this Chapter, and ended my booke called the Enchi-  
ridion, of a short and briefe manner of curing, as we call it,  
of Wounds, fractures, and dislocations, &c. But for as much  
as the medicines therein contained, are put in the Latine  
tongue, peraduenture you will mislike therat, being that  
the rest is in the English tongue, But to you my brethren  
that excellently the noble art of Chirurgerie, I haue learned,  
I trust I haue done it both for your commoditie, and also for  
your profit.

Where are two speciall causes why they be put in the  
Latine tongue; the first cause is, so that we cannot apte-  
ly give all those simples English names; and therefore for  
as much as pearles and other simples, are called by blasse  
names, according to the use of the country from whence  
they grow in. Therefore if I should haue put  
them in any of these English names, in other parts of  
our Countrey should not haue understood it. And further-  
more if I should haue put part in English and part in La-  
tine, it should haue bene a defacing of all the whole compo-  
sition of medicines. The second cause is, that I haue done it  
for your commoditie, so that when you shall see to understande  
your receipts of medicines in the Latine tongue, not onely  
by use of compositions, but also the simples also, so that there be no  
medicine set forth in this booke, but it be got to any good  
craftsman, he will make it you presently, and declare unto you  
euery simple thereof, which shall make the in short time, it  
shall be sufficient to understande the whole scope of making  
of medicines out of any Author, in the Latine tongue, as  
for you my brethren in London, this shall be to you a more  
commoditie, so that may moue you further to put  
a question to the medicine. So that within short time,  
you shall gather the whole knowlege, both of simples and  
compounds, and also apte termes pertaining to the arte of  
Chirurgerie, in the Latine tongue, in which the most part  
of the arte is written.

And

# The fourth booke of

to And hereafter if God shall see fit, and this my simple  
 worke taken in good parte, I shall not cease, but let forth  
 into you one Herball, with the true pictures of herbes and  
 trees, with many other simples appertaining to the art of  
 Chirurgrie, with so many names as well in English as  
 in all other tongues that I can learne or understand, with  
 their vertues, properties, a place where they grow in  
 which haue may be such a picture, that you shall in short  
 time vnderstand all these simples contained in this booke,  
 and manie more, not onely their qualities, but all their be-  
 neficiall properties, which hath bene found out by long experi-  
 ence. And although this little booke named the Enchiridion,  
 is verie briefe and short, yet shall you finde therein con-  
 tained a true and right methode of curing according to the  
 old and new writers, with the whole scope and intention  
 curatiue, how to apply our medicines, when to apply them,  
 to what place they ought to be applyed, and at what time,  
 And although many Surgeons haue good medicines that  
 may serue for the like purposes, as these that I haue made  
 mention of before, yet notwithstanding for an example I  
 haue set forth these, that ye may the better vnderstand the  
 true methode and maner of curing, by the nature and opera-  
 tion of them.

Thus I take my leave of you deare bretheren in Iesus  
 Christ, wishing vnto you the perfect knowledge of this  
 noble arte, which is onely the gift of the holy Ghost, and  
 you wot to ble it, that almightie God may wooke with you  
 to the comfort of the diseased or hurt persons: let be all pray-  
 ers, which increase our knowledge, in all vertuous artes and  
 sciences, that we may be able to the glory of God to whom  
 be all honour and praise, without ende Amen.

Thus I take my leave of you deare bretheren in Iesus  
 Christ, wishing vnto you the perfect knowledge of this  
 noble arte, which is onely the gift of the holy Ghost, and  
 you wot to ble it, that almightie God may wooke with you  
 to the comfort of the diseased or hurt persons: let be all pray-  
 ers, which increase our knowledge, in all vertuous artes and  
 sciences, that we may be able to the glory of God to whom  
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 you wot to ble it, that almightie God may wooke with you  
 to the comfort of the diseased or hurt persons: let be all pray-  
 ers, which increase our knowledge, in all vertuous artes and  
 sciences, that we may be able to the glory of God to whom  
 be all honour and praise, without ende Amen.

# An excellent Treatise of

Wounds made with Gunshot, in which is confuted both  
the grose error of Hieronime Brunswicke, John Vigo, Al-  
fonse Ferrius, and others, in that they make the wound  
benignous which commonly through the common  
powder & shot, and also there to set out a per-  
fect and true methode of curing these  
woundes. Perfitly compiled and  
published by Thomas Gale,  
Master in Chirurgie.

**M**icrocosmos (whom Man we call)  
of two right noble parts is made:  
The Soule, whose life is eternall,  
and bodie eke which hence must vade.

This last part doth the first containe,  
as long as it in health indure  
Vntill sickness and all her traine,  
doth proclaime wars and death procure.

Now sickness quite far to expell,  
Apollo hath the waye out set  
What arte doe Maister Gale doth tell,  
whereby sickness force we may let.

The Canon shot (dreadfull and fell  
like thunder bolts and fire flame)  
How to remove the waie, he tell  
in this Treatise of worthe fame.

His name of right Gale we may call,  
for Gale Milke doth signifie;  
And as milke nourish aboue all,  
so doth this Gale right perfectly.



His finger milke of learning sweete,  
 both the minde foster and feede:  
 Shewing the waile that is most meete,  
 Microcosmos to helpe at neede.  
 Now, what reward for him is due,  
 that for mans ease doth such things shew:  
 The wounded man shall be iudge true,  
 and learned heads which it doth know.  
 John Field Chirurgion.

# Thomas Gale Maister in Chirurgie, vnto the friendlie Readers.

**I** am not ignorant friendlie reader, but ma-  
 ny, yea, & greater sort, will not a little mer-  
 uelle, that I should go about to overthrow  
 that, which for a manifest truth, of no small  
 time hath bene received and embraced, yea,  
 and not onelie received, but also with the  
 pens of diuerse (other wise well learned) confirmed and esta-  
 blished. We thinke I heare them saye, what kinde of sel-  
 lowe is this: What a Paradoxe hath he published: Is his  
 knowledge and experience passing those famous writers &  
 haue left so noble works behind them? To all which I an-  
 swere, that the matter must be tried, iudged, and determi-  
 ned, not by antiquitie onelie, nor by authoritie, but by rea-  
 son and truth: And yet I will attribute as much to their  
 authorities as some other will, knowing my selfe far vnable  
 to match with any of the. And also they be such as I haue  
 profited by, yet the truth is to be preferred before their au-  
 thorities. Wherefore I beseech my loving reader, not to  
 condemne mee before thou hast read my worke, and way-  
 ed the force of my arguments, wherewith I do maintaine  
 my



not naturally, but by accident, as it is said in some books, and kind  
of water, which is made of the mixture of the same, and is  
liquefied, and is of the same nature, as both, and is of the same  
the same. But then being you know what venime is, let  
be diligent to consider whether the small Venime powder  
only is due to this definition, if not, then certainly it is  
not venimeous, as it is said in some books, and is of the same  
And for because it is compounded of Sulphure, Sulphure,  
Saltpieter, & coale, it is requisite to let out what these three  
are, for so shall we the more assuredly conjecture what the  
compound is, and whether it be venimeous or not. And here-  
in for the perfect knowledge of these simples, we will resort  
onely to the authorities of Dioscorides and Galen, the prin-  
cipall writers of this matter, least in rehearsing all the  
authorities of those who write of the nature of simples,  
the worke might growe greater than I have determined.  
Then if these writers touch our opinion, we will fur-  
ther wade and consider what sayle experience hath here-  
to, or whether that there resulte a venime, the simples be-  
ing mixed, or else that through alteration in time of the  
whole, it cometh to venime. I thinke these be the prin-  
cipall argumentes they have to maintain their long an-  
tient.

And now touching the authority of the ancient writ-  
ters, I will beginne with Dioscorides, who in his first booke  
libell. Chapter, of Sulphure in this manner.  
Sulphure vive is brought the best, which is called Apollon,  
shining like a glowe worme, and nothing like. And in  
generall, that Sulphure is allowed which hath not tasted  
of fire, water, greene, and fat. There is great store of  
it growing in Melio and Lipara. The use of Sulphure  
both heale, dissolve, and corrode morbid. It is good against  
the rough, short breath, and purulent excretion, taken in an  
Egge, or using the fume of it. And the fume of the same  
burnt bringeth out the childe in birth time. It doeth take  
away Lepre, scurf, and scabrous unguet, mixed with  
Argentine: but tempered with vinegar it is of use to  
against the Lepre, and taketh away the malignity, it beate  
the



the sting of the Scorpion, it esse being put in the white vinegar it is good both against the humours of the Scorpion, and also of the Scorpion, with salt water it taketh away the itching of the bodie, it helpeth the handier sprinkled on his forehead, or else taken in a rare Egg, it profiteth much in distillation, and stayeth stinging, with water and salt water it is good for those which have the gout, the member being washed in the same. It helpeth the thicknesse or rather difficultie of hearing, y<sup>e</sup> fume of it being received by some hollowe pipe: it taketh those which are called Letargies, it stayeth the fluxe of bloud: Wounded Gares being annointed with it, mixed with Wine and Honie, are by it cured: These be the virtues of Diacordides touching Sulphure. His minde in effect concerning Saltwater, in the first booke, lxxxix. Chapter are these: Pitruum is y<sup>e</sup> best which is light, of rose or white colour, full of holes like to a Spunge, such is brought from Binya. It bringeth out humours fixed in the deepe partes. The Spunge of Pitro is indged best, which is most light, friable, in colour almost Purple, or spumous and biting, such is brought out of Philadelphia in Lidia. The second of Aegypt. Also in Magnesia. Both Pitruum and eake his spume, hath the strength and vision of Salt.

Furthermore, Scorpion hath y<sup>e</sup> Col like if it be taken with Cummin in Honey, or with Wine boiled, or any thing which doth lessen with it, as Rue or Dill, it is also used in Feavers, to annoint them before the fitts suspected. It is mixed with emplasters, which doe extract and dissolve, it doeth extenuate and put away the Leprie, with warme water or Wine, it doth away the noise of the eares, inflations, and perulentia. The fifth use of the same it doth purge and cleanse, tempered with Vineger distilled and put in, it helpeth the biting of Dogges put with the grease of an Ass or Swine, it doeth open Felons mixed with Resine, Terabentine, and in the Wopple, rubbing the skinne with a Figge, it taketh clowens, if light tempered with Honie, and the venime of Wasps, being drunk with Bees, or else with water, if they have bene

## A Treatise of Quaffes

Witten with Buprestis. Also to those which have drunke  
Wills blood with Lascivium, and it is to be given also  
to them which cannot taste their meat. It is used also in O-  
pisthotonis remissionibus et luxatis cum cerato, and in resolu-  
tion of the tongue mixed with bread. Some doe burne it on  
the chales, putting under a new tulle or pot vntill it be  
red hot. Thus much also out of Dioscorides touching it. Item.  
Solin Iudas heare Galen, who speaketh of Sulphure in this  
maner.

All kinde of Sulphure (saith he) hath a power attrac-  
tive, and is of hot temperament, and of subtil substance,  
inasmuch as it resisteth & poison of many venomous beasts,  
for & oftentimes used it against the braine of Turtur ma-  
ximus and Hyaco. And when I had taught it certaine Fi-  
thermen, I after a short time returning, they marvelously  
recommended this medicine to mee. The vse of it is, that be-  
ing dyed, stroked on the wound, and also tempered with  
spittle, for when I haue cogitated these things, I found the  
same by experience. In like sort it serueth being mixed with  
wine, so: I taught the Fithers such medicines as might re-  
pelle be prepared, and I saide they might applye it both  
with oyle and Wine, and Turpentine, and surelie ex-  
perience shewed all these so to be. Also I haue not a few  
times (with this kinde of Sulphure mixed with Tur-  
pentine) heales scabs, Pustules, and Leprie, for it clean-  
seth all such diseases, and doeth not repelle them into the in-  
ward parts, whereas diuerse other medicines which cureth  
these sicknesses haue a mixed propertie, that is to saie, they  
doe both digest and also draw backe. Hereto Galen of  
Sulphure.

Item of the heauyness of Nitrum, called with the Latine  
of the Sulphure Nitrum (saith he) is in a meane in strength,  
betweene Sphondium and Salt, but being combust, it go-  
eth nearest the nature of Sphondium, for by vision it is  
shewed to more subtil and thinner partes. Therefore it doth dry  
and digest. And if it be taken inwardlie, it doth cut and ex-  
terminate great and fithie humours, much more than Salt:  
Sphondium except great necessity is not to be  
taken

taken in this sort; because it purgeth the stomacke, and doeth  
extenuate more than *Pistum*. Whence certain rustick  
man used *Pistum* as a remedie against suffocation of the  
king; when anie had eaten Mushrompes (they call them in  
Latine *Fungos*) and it euer profited him. And I my selfe  
haue accustomed to use *Pistum* both to purge the stomacke, and  
chiefly the spume of it in the like effects. Whence thus out of  
Galen also touching the qualities of *Pistum*. He saith thus.

The like wordes both of Sulphure, & *Pistum* hath Aetius  
well next. Now by their authoritie you may easilie iudge  
that neither of these two are corrupters of mannes bodie, ei-  
ther inwardly taken, or else outwardly applied. And that  
they nothing agree with the definition of venime. For *Dio-  
scordes*, *Galen*, and *Aetius* forme Sulphure and *Pistum* so  
farre from anie venomous qualitie, that they used them as  
approved and excellent medicines against venime. Where-  
fore neither *Iohn de Vigo*, *Alphonse*, nor *Rauenswicke*, shall  
be able by anie appoyned authoritie to seeme to prove that  
the Simples (entering into the composition of the small  
pouder,) are venomous; except they will affirme the Coales  
to be venime; which were too ridiculous; seeing that wo-  
men with child, or those which labour with that sickness  
which is called *Pica*, and also children daile eat Coales  
without danger.

Furthermore, daile experience sheweth the use of Sul-  
phure to be profitable. For it is a common practice, to giue  
it in milke to children beried with woymes. And as for gra-  
pouder it selfe, in defect of other medicines, I haue put of it  
in these wounds, to drye and exicate, to the great comfort of  
the patient. And therefore it is not in mixture and composi-  
tion venomous, but medicinable; and hath in him the very  
finest absteriue and desiccative. Neither in those that are  
wounded with that of this pouder doe you see anie of those  
accidents to followe, which are as inseperable in venomous  
that. Although *Alphonse Ferrus* would shew that putrefac-  
tion, corrosion, ulceration, and corruption shoulde be  
the proper accidents in venomous wounds. He sheweth  
false.



fire, that perspiration letteth of hotte and moist humours,  
 there followeth not putrefaction, or that there appeared not  
 in ulcers corrosion, called therof Vlcera Phagedenica. Now  
 aptlie therefore doth he applie these as proper accidents in  
 ventined woundes, when they are found in more than an  
 hundred diseased. I doe make him selfe iudge. For  
 thermore, the cure it selfe of these woundes, agreeth with  
 those that be contused and bruised, without the addition of  
 any medicine, or Mercuriū sublimatū against venime, as Al-  
 fonso himselfe doo little consider his assertion, when in the  
 curation of woundes made with Gunne shot, he forget-  
 teth to be reimpared against venime, which shoulde be his  
 chiefe and first scope, if the wound were as he affirmeth. So  
 that it is more clere than midnie, that the powder doeth  
 not receive any venime through the fire in shooting, and  
 that also it is evident in those that are burnt with powder,  
 for there appeareth no mention of venime in them. And the  
 burning is easily cured, and that with light medicines. As  
 his other argument that Alfonso bringeth is, that the powder  
 pound inwardly commeth to the fourth degree in heate, and  
 therfore is venomous, and so consequentlie the shotte, and  
 therfore the wound with it made. But let us see I pray  
 you the force of this argument. Sulphure is hot in the  
 fourth degree, and Saltpeter hot in the end of the second de-  
 gre. Now in the composition there is put one parte of Sul-  
 phure, ten partes of Saltpeter, and one parte of coale; the  
 coale is colde and drie, and therfore addeth not heate to the  
 composition, neither the ten partes of spiritum, being but  
 in the second degree hot. Nowe then shoulde this powder be  
 hot in the fourth degree. As for the like example, if you put  
 to one parte of boiling water, ten partes of water but halfe  
 so hotte, will it abate the heate of the one parte, or make it  
 greater? I suppose none is so rude to confesse that it will  
 increase the hotnesse of the one part. But in the waie of dis-  
 putation you will graunt this absurditie. What then will  
 be the waie all things that are in the fourth degree hotte,  
 to be therfore venomous. Then surely hotte wood,  
 fire,

As burning coles, Pepper, Bellitorie, and a great number of healthfull simples, should be numbred among venomed. True it is that venomes are deadly in themselves. But it doth not therefore follow, that what so is deadly, that same is also venomous, this is no true conuersion. But leaving this as a thing to manifest, to make more wordes of: I will consider whether the shot receive such heat, that it can make an asher in the wound, as they affirme surely; I in the warres, haue asked diuers wounded souldiers, what heate they perceined in the time of the pearcing of the shot. Who all answered, they felt no heate, but a certaine confusion, and I my selfe haue presently taken by the pelles when it hath salne at the marke, and felt no heat at all to be made account of. But that you shall perfectly vnderstand and be Judge your selfe in this case. Hang a bagge full of Gunpowder on a place couenient, and stand so far of as your peece will shotte leaue, and shote at the same, and you shall see the Gunpowder to be no more set on fire with the heate of the stone, then if you cast a cold stone at it. But say thou how happeneth it the that there is an asher in such wounds. For there is neuer asher but cometh of canterisation: either actuall or potentiall. To this I answer, that it is no asher, for then it were not possible there should be fluxe of blood in these wounds. For Galen saith, things adurent and burning, doth stay and stanneth blood.

But you will reply and saye, there cometh no great fluxe of blood: to which I answer, the cause of that is, the great confusion which repelleth the blood, and hath so dried the part wounded, in thrusting the blood to the other parts that there is the lesse fluxe. But this is most euident, that there euer followeth fluxe more or lesse, and therefore it is no asher but confused flesh. This might also be a reason manifest to the senses, that if the pelles be a canterise (which of force it must be, if it doe make an asher) how happeneth it, that it burneth not garments when it percell them first, and then the bodies. For you shall neither see neither smell any token of aduersion or burning: where as if the shot had no more heate then a

little sphere of fire, it would in like rate easily burne and garments.

But I think these arguments sufficient. Therefore knowing that neither by authoritie of any learned author, neither by experience, neither yet in composition and mixture, and to conclude, neither in the shooting the usual powder is found to have any venomous quality, of the which such heate as is able to make an ulcer: Nor them cause (I pray them) therefore, th, their fond opinion, & not obstinately persist in their error continued, seeing that the senses much otherwise judge: and not be ashamed to embrace a truth, if from hence, it should the usual powder not be venomous, no, the worth of such heate that can make an ulcer: neither which if they doe, they shall not be tormented with such care to take the fire (as they commonly call it) out of the wound. But considering that this wound made with gunshot, is to be numbered not among greene wounds, not among venomous, but only among those which are called confused, bysted, or crushed wounds: They shall with great gaines to the wounded man, and much profit and saue to themselves, haue as prosperous success in their cures, as some of them haue sustained shame and reproch. But now to the generall cure of those wounds made with gunshot.

The generall methode and way to heale such wounds as are made with gunshot.

### Cap. iii.

Now being (as I suppose) I haue sufficiently proued, Neither the shot or powder to be venomous, It is convenient to shew the methodicall cure of these kindes of wounds. And there are two intentions properly hereto belonging. The one is to deliner the wound of all such things as are not agreeing to nature. The other is restoring of such things as are lost and perished. I call things not agreeing with nature, not onely shot, or splinters, or shivers of wood, cloth, ball, oyle, or such lyke: But also the clotted blood, matter, bysted flesh, and such lyke as haue



no societie with nature. The way how and in what sorte these things are to be removed, you shall finde in the fifth Chapter of the first booke of my Enchiridion. The restoring of that which is lost, is properly the office of nature, as to engender flesh, blood, and such lyke partes as are to be engendered. Notwithstanding the Chirurgion herein is Nature's minister, and shall labour to bring the parts to his right temperature: And it is reduced to conserve it in the same estate.

And although in the first Chapter of my Enchiridion, I have showed a generall Methode of curing confused wounds: yet I will not refuse for the helpe of the inexpert, to set out in this place a more ample and large manner and way of working.

Therefore the cure of these kinde of woundes, is to remove things fixed in the woundes with instrumentes thereto convenient. As Crooke billes, Gole billes, Terebilles, Pipers, or Tonges. And then to use your endeavour to cure this wounde, as you would doe confused and broyled woundes.

And for because the broyled flesh must of force be taken awaye, and that with so much expedition as you conveniently may, without sharpe and biting medicines: Therefore you shall to this wound confused sake, of Precipitate Mercurie Dragma. Or according as you shall see cause, and mixe it with simple oyle, or oyle of Roses, or with butter, or frethe Barowes grease, and laye it to the confused places.

Bartholomeus Maggus an excellent Chirurgion, in these woundes after the things fixed in, be removed, the sure of blood stayed, and the wounde cleaned, flesh to put into the wound, of his oyle one drop, unto which oyle he giveth great commendation, in all confused woundes, and the description of it is as followeth.

Rec. Resinæ abiectionis. v. ynces.

Olei Rosacei. ij. ynces.

Sem. Hypericonis. v. dragmes.

Sem. Momordicæ. iij. dragmes.

## A Treatise of Gunshot.

The Herbs shall be bruised, and put in a double bellie, with the oyle, and let them boyle halfe an houre. Then straine them, and keepe them to the vse. This oyle doth ab-  
 swage colour and paine, it both concoct and digest, and pre-  
 serueth the sound flesh from corruption and putrifaction.  
 There are also other medicines apt and conuenient for these  
 wounds, but I will repeate one which is singuler, and as  
 I might tearme it merueilous: for it separateth the con-  
 fused swelling, and putrified flesh, and that without dolor or  
 paine. And furthermore, it so concocteth and digesteth, that  
 you shall not perceiue any kinde of cruditie in the wound, &  
 this medicine is called Vnguentum Egiptiacum.

Wherefore I wish that the Surgeon doeth both dippe  
 his tents therein, and also lay it on his splegants. For in  
 two daies or thre at the most, yea, in great totaled wounds,  
 it worketh his effect. And here by the way, I must put the  
 Surgis in memorie, that his tents be not to bigge or long,  
 that they be not rough and hard, for the bigge tent doth ex-  
 tend the member, the long doth prick and induce colour:  
 the hard and rough, doth as it were teare the flesh.

Let the scales and splegantes therefore be made of  
 sbe and fine linnen cloth, that it bringeth not paine to the  
 affected part. After the confused flesh is remoued by the vse  
 of your Egiptiacum, then apply to the place things that will  
 mundifie, and moderately drye, as Honey of Roses tempe-  
 red with the flower of Barley-meale, or Beane flower, or  
 to which you may adde, Aristolocina rotunda, Centaurium  
 minus, Euphorbium, Aloes, Turpentine, Frankensence, Plan-  
 taine in powder, or iuyce, flowers of Pomgranade, Cipresse  
 nuts, and such lyke, according as the nature of the part, and  
 time of the yeare both require. And here I speake not either  
 of purging, letting of blood, scarifying, & boring, more then  
 to admonish them, that these are necessarie, & must of force  
 be vsed in these wounds: because I woulde the Surgis should  
 not rashly attempt herein any thing, for the great peril that  
 may follow: but rather vse the discrete counsel of the lear-  
 ned Physitian.

Neither in those wounds which are great, and perillous  
 with

shot, I should have their straight waies to vnderstand the patient (as many rash Imperitues now in these daies doe to doe) except Oppaculous or Gangrena, haue utterly mortified the part. For I my selfe haue cured a certaine Soldier who was shot with a ball, through the thigh: there was more then three fingers breadth taken away of the bone in length; with the hottie, and yet (God be thanked) through diligence and paine, the patient was restored to health: and hath the perfect vse of the legge, without any paine or griefe, more then that it is shorter then the other. And thus much touching wounds of Gunshot in generall. The rest togers as the particular cure varieth from the generall methode set out according to the part wounded, you shall haue in their proper places following.

Of a simple wound in the head, made with Gunshot. Cap. iii.

**I**f wounds made in the head with Gunshot, you shall diligently consider whether the wound be simple or that it be compound. For according to their diuersitie, the intentions curatiue doe much varie and change. And so for because there may be these two kindes of wounds, I will generallie of them entreat, beginning with a simple wound first. Therefore if the wound be simple, the cure is eaiser, and without danger: If that the patient haue not a bodie replete with euill iuse, or haue tasted of that contagion, which shallter Doctor Cutingham, in my iudgement, hath of all other most aptly giue to name, Chameleontialis (Vnguarie it is called Morbus Gallicus) as appeareth by his booke written on the same. In which he sheweth the errors of such as haue heretofore hereof written: and setteth out a most perfect methode & new way of curing without fumes, Quatun, vnguents recetuing into their composition by chargeon, or such like. But now to that from whence we are digressed.

If the bodie of the wounded patient be affected as is aforesaid, although the wound be but small and simple, yet most



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most, trifling wounds in such bodies are not cured without much diligence. Therefore in such bodies you must labour to purge the ill humors, as in Chameleontial, both to let blood, purge, and sweate, and by oyle, and things convenient rectifie the bodie and principall members of the same. So shall the cure of the wound be more speedie, and also prosperous. But now to the true cure of such wounds as are called simple. First let the haire be shaven round about, after apply this unguent following.

Rec. Precipitani optimi. ij. dragmes. Butiri salis experti. Olei Rosarum Ana. dragme. j. sc. Croci. ij. graines.

Mixe these and make an unguent, which you shall laye on your solegarnts being made of soft linnen cloth, and apply it to the wound.

Then you shall laye on the wound also Bolus armenius, tempered with oyle of Roses and the white of an Egge, lyke an unguent, to defend the part from accidents.

And this shall suffice for the first daye. You may also at the beginning, use in steade of the seconde unguent, this comfortable Cataplasme following.

Rec. Olcorum myrtillorum, Rosarum, Ana. ij. vnces. Baulastiarum, Rosarum rub. Ana. i. vnce. Boli armeni, Sanguinis draconis Ana. j. dragme. Myrrhæ halfe a dragme.

Make of all this a Cataplasme according to arte. The seconde daye, you shall use some medicine that bothe doeth digest, and also moderately drye the wound, of which sort this is one.

Rec. Terebenthinæ lotte, one vnce. Mellis Rosarum, two vnces. Butyri salis experti. three dragmes. Farinæ hordei, Aristolochiæ rotunda, Radicis iroos, Ana. j. dragme. Aloes, halfe a dragme.

Mixe these and make all in an unguent, and use this untill such time as there appeare signes of concoction in the wound, at which time you shall no more use butter in the unguent, but in steade thereof, mixe with it this powder following.

Rec. Sarcocollæ j. dragme. Corticum Radicis papaveris, halfe a dragme. Farinæ orobi, Myrrhæ Ana. dragme. j. semis.

Make

And take this in powder, and temper it with the other two  
 Quent. And use this untill the wound be perfectly cured.  
 And this is the cure of a simple wound in the head.

Of wounds compound, which chaunce in  
 the head through shot,  
 Cap. iij.

**I**n the cure of compound wounds of the head, you must  
 first of all (because you may the surer iudge and dis-  
 cerne) use incision and make Cranium bare: the forme of  
 cutting most apt, is to make it in forme of two right lines  
 crossing themselves in the middell.

After which incision made, you must with some in-  
 strument sharpe and flat, rayse the skinne and fleshy from  
 Cranium.

And if you see any shot or peece of bone, which may easi-  
 ly be taken out: you may doe it with some convenient  
 instrument.

But if it will not without difficultie be taken away,  
 then wet your stupps in astringent wine and vineger mix-  
 ed with Bole armeniake, and Sanguinis dyacons: and lay  
 it to the wound. The next day following you shall use this  
 receit next ensuing foure or five dayes, for feare of inflami-  
 nation to follow.

Rec. Boli armeni. ij. vnces. Albumen ouorum. 2. Olei Ro-  
 facei omphacitis. ij. vnces. Croci. iij. granes. misce.

Then you may very well use this digesture following,  
 so long as shall be thought convenient, and that untill the  
 thing fixed will easely be taken out.

Rec. Terebinthine lotæ in vino. iij. vnces. Ouorum vitel-  
 la. iij. Olei Rosati. ij. vnces. Aloes. ij. scruples. Croci. iij.  
 gualtes misce.

In other things the cure of it doth not differ from the  
 cure of simple wounds. But if any beine under Cranium  
 be broken, and maketh effusion of blood: If Dura mater,  
 or Pia mater, be rent or torne, if Cranium be broken: there,  
 by a hyaine is depressed, then you must with all expedition  
 set

feeling of pain in Cranium and give the sign of the same and  
take out the blood or matter as what else both trouble can  
deprelle the patient without signifi- to you set it and on

And for because you may know perfectly, whether the  
brayne is hurt or not, (although your senses outwardly  
cannot discern any thing) note these signes following. If  
he haue vertiginem, or thinke he seeth manie lights, if he  
haue alienation of minde, or swelling and tumour of the  
eyes with rednesse, or bleeding at the nostrilles or eares, al-  
so vomiting, relaxation of some one parte, and Apoplexie.  
These be infallible signes that the braines suffer, when as  
they consequently follow after the head be wounded. And  
when you are constrained to ble a trappan, you shall make  
tentes of Cotton, Wolle, or linc, and put into his eares, and  
commaund a man to compresse with his hands the patients  
eares, least the noyse make him to much affraide, and faint  
hearted. And looke that you haue alway in readinesse, softe  
and fine clothes, where with you may muffle Cranium and  
wype away the blood.

Then take you haue a peece of Silke or sendal, and we-  
ring to the opening of Cranium, well wet in auster & slip-  
ticke wine, or in oyle of Roses, if there doth appeare any  
cloddes of blood to lye upon the pannicles, and put this silk  
upon the pannicle, & with an instrument put it vnder Cra-  
nium. Then put stuphes made of the finest carded woll you  
can get, and wet them in oyle of Roses, and lay them on the  
place. After that, fill the rest of the wound with clothes dip-  
ped in the same wine and oyle, then with your hands thrust it  
out, & lay upon the same cloth, Wole armoniacke mixed with  
the white of an Egge, and apply it vpon the same wound,  
and for to defend the member from dolour and inflamma-  
tion, you shall laye round about the wound this medicine  
made of Mel rosaceum, Farina hordei, and Iris. And when the  
hole made in Cranium doth beginne to be filled with flesh,  
then with a raspatorie, take away the sharpe edges of the  
bones, and bring the lips of the wound by little and little  
into their proper places.

And if through the negligence of the Chirurgion, or the



In habite and disposition of the patients bodie, or anie dis-  
temperature, there followeth corruption to anie part affect-  
ed of the braine, then you must againe returne to the vse of  
precipitate, or Vnguentum Egyptiacum; which is most ex-  
cellent in this case. And euer after the doctrine of Hippo-  
crates and Galen, bee mindfull that thou worke softly, spee-  
dely, and wth so little paines to the patient as possible you  
may. Wherefoze handle the partes tenderlie, and wipe all  
filthie mattier awaie. Let the rollinges onelie serue so; to  
keepe on the medicines, wherefoze let them not be too strait,  
and so to prouoke paine. Let the bellie be flurible and loose  
by clisters, suppositoies, or purgatis, if y it be not naturally  
soluble. And in this case you may giue the wounded pati-  
ent enerie daie, or else euerie second daie, one pill of Agarike  
or Aloes. The diet must bee most small and slender from  
the time of the receiuing the wounde, untill the seauenth  
daie. The meats shall be the broths made wth a Chicken,  
the drinke shall be water boiled wth Sugar, and a little  
Cinamon, or else small Ale & Beere. From the xi. or xiiij.  
daie you may giue him at meate a little French wine, or if  
the wine be too strong, mire it wth fountaine water, or wa-  
ter of Buglosse and Bozage, his broths made as befoze, wth  
chickens or Capon, and you maye thicken the broth wth  
bread, wth Almonds, or such like things that doe nourish.  
Notwithstanding let all be done wth great discretion, and  
that the patient obserue his due houres of dinner & supper.  
Other things required so; the order of 6. rerum non nat. Let  
the Chirurgion learne of the skilfull Phisition.

#### Of wounds in the brest.

Chap. 5.

**A**lthough the wounds made with Gun shot are in all  
partes of the bodie one in effect and grieffe, yet doth the  
cure differ according to the place wounded. Which  
thing prouoketh mee to describe here also the scuerall cure  
of woundes made in the brest. Wherefoze if the wound  
in the brest pearceth not through, you shall cure it lyke  
other woundes. And the first two daies applie Vnguen-

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cum ex precipitato, or some other which hath the like facultie. And after that vse some medicines which will gentle ericate and mundifie, as Mel rosarum simplex, or else mixed with Turpentine, Aristolochia, Farina hordei, and such like. And it shall bee right good from the second daie vnto the fourth or fifth daie to put to your absterfing medicines fresh and new Butter. So you may make your compound after this manner.

Rec. Mellis rosarum, j. ounce, Terebinthinae, Butyri recentis, ana, ij. drams, Farinae hordei, Aristol. rotunda, ana, j. dram. Mixe these together, and dip your tents and splegants in them. But vpon the wound you shall vse to laie this medicine following.

Rec. Album, vnus ovi. Olei rosati, j. ounce, Boli armeni, j. ounce and a halfe, Misce.

But when as that matter doth begin to appeare in the wound, then in the stead of this last remembred, you shall vse Emplastrum ex Chacitide, vel Triapharmacum, made of Oxaleum and Argenti Spuma, spread on a linnen cloth, and layed on the wound, and when the wound is cleansed from superfluous humiditie, you shall cure the wound like those whereas wanteth some generation of flesh, wherefore for this intention dip your splegeats in this medicine, to whose composition is required.

Rec. Succu Myriophylli, Mellis rosati, Terebinthinae, ana, one ounce, Farinae fabarum, Hordei, ana, two dragmes and a halfe, Thuris, Aloes, Aristolochia rotunda, ana, one dragme.

Mixe them together, and with a slice stirre these on the fire, vntill they bee well incorporated, and reserue it to thy vse. Now if the pellet or shotte haue pearced the inward partes, it is deadly and mortall, both for breaking some bones in the breast or ribbes (for the pellet cannot pearce betwixt the ribbes without breaking of some of them, except the shot bee small like haile shot,) and also for pearcing the inward partes. Notwithstanding where the pellet or shot moneth in the capacitie of the breast, you shall with a Probe handsomelie bent for the vse, search where it is, and

it being found, bring it vp to the orifice of the wound; and then with your Forceps take it out; as also the blood. This being done, you shall vse this vnguent following two daies onelie.

Rec. Olei rosati omphacitis, iij. dragmes, Terebinthi, x. j. dragme, Pulueris precipitati, iij. scruples.

Mixe all these well together, and dip your tent in it. But heere you must take heed that the tent be made of most fine and soft linnen cloth, and that the length of the tent be no more than the thickness of the ribbes, neither the bignesse more than serueth the orifice of the wound. And vpon the wound you shall applie in manner of an Emplaster Bole armoniacke, the white of an egge, and oyle of Roses, untill there appeare concoction in the wound, at which time you shall no more vse it, but in the place thereof you shall vse Emplastrum Barbarum, or else ex Chalcitide, whose compositions you shall finde in my Antidotarie. After the second daie you shall vse this vnguent.

Rec. Butyri recentis, ij. dragmes, Mellis rosati, halfe an vnce, Glutinis albotin, iij. dragmes, Aloes, Farina hordei, Fulureos, ana, j. dragme, Misce.

When as you haue used this medicine the space of eight daies, you shall leaue out the Butter, and in place thereof double the quantitie of Honie, and you may make an injection to mundifie the breast with water, in which is boiled Eiqdozie, Figges, Raisons, and the lesse Centaurie, or Lupines. The rest of the cure of these wounds doe not differ from the methode sette out in the second booke of my Enchiridion.

Of wounds with shot made in the third ventricle.

bellie. Chap. 6.

**T**Hese wounds made with Gunne shot, if they be onelie about the bellie or flanks, without pearcing thorough, and hurting the spine of the backe, are cured as other simple wounds made in the flesh. First taking out the shot, then to remoue the hurted and confused flesh with



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medicines conuenient, as you see set out in the curing of wounds of the head and breast. When the third date to vse some absterfices, which also do somewhat excise and drie. But if the shot haue pearced through the bellie, and haue wounded either the stomacke, liuer, spleene, kidneis, intestines, bladder, or anie of the greate veines or arteries, then there is no hope of life to be looked for. But if the shot haue pearced the bellie, and yet not wounded anie of the foresaid members, then the shot being taken out, there is some hope of reuerie, but yet the patient is not free from perill and daunger. Therefore you shall labour to get out the shot, placing the patient vpon the wound, and roll him from part to part, prouoking thereby the shot to come to the orifice of the wound, then with a probe made apt and conuenient for the same vse, take out the shot. But if so be that you cannot without great paine and much searching finde the shot, it is much better to let it remaine within, than with prouoking of moztall accidents labour the taking of it out. For there is no daunger in letting the shot remaine in, and there is great perill in long searching, for that the aire doth alter the inward partes, and in searching, some inward part maye be hurt with the Probe. I my selfe seruing at Murrell, vnder the mightie and puissant Prince, Henrie the eight, about the yeare of Christs incarnation 1544. had the experience of eleauen sundrie souldiours shot into the bodie, without pearcing of anie inward member, and I could not get out the shotte without greate difficultie and making incision, and therefore I letting the shotte remaine within the bodie, did perfectlie cure the patients, and they liued long after without anie grieue or paine prouoked by the shotte.

In like manner about the yeare of Christ 1557. when as Philip king of Spaine besieged Saint Quintaines, I then seruing vnder him, had diuerse souldiours in cure wounded in lyke sorte as is rehearsed, and the shotte still remaining in the bodie, they were (thanked be God) restored to health. I doe also now call to remembrance that there came a souldiour to London, when I first practised the art  
of

of Chirurgerie, who was shotte in the bellie at the siege of Parma, and made perfectly whole, the pellet remaining within. This souldiour twelue yeares after he was thus cured, coming to the Citie, had a great Apostume in the flanke, & then among other being called to the cure, we applied such medicines to the Apostume, as we accustomed doe to Apostumes named Bubones, engendered in that parte. And when the Apostume brake and came to suppuration, we took out a pellet of Lead, and after did cure the ulcer, and made the man whole. These I doe bring onelie for examples sake, that other Chirurgions being in the warres should not so much busie themselves, or put the patient to paines and in danger, in taking out the shot. But note to that from whence we are digressed. The shot being taken out (if it may easilie be done) the contused and bruised flesh remoued, & the absteriue medicines applied, you shall procede with incarnatives and consolidatives, as is set out in the cure of woundes of the bellie, in the second booke of my Enchiridion. And if bloud or mattier be in the bellie, vse wine warmed, and make infections. But how much the sooner thou doest haste the cure of the wound in the belly, so much thou makest the patient surer of life, and thy selfe of worshippinge of the cure. Thou mayst vse well in these woundes when neede shall require, this incarnative following.

R. Thuris, Aloes, Fatinae hordei, ana. j. dragme, Terebinthina, Mellis, Sacci myrtophylli, ana. ij. dragmes. You shall mixe the flower with the iuyce, then dissolve and melt the Honie and Turpentine at the fire, then put all together and make an vnguent. With this you shall spread your splegants, and dip your tents in, & when the flesh doe grow well, and that the wound begin to be filled, you shall applie such medicines as are astringent & both drye, as honie mixt with powder and Waile berries, Wallike, flowers of Pomgranade, and Turpentine. And for an emplaster you may vse Emplastrum Chalcitides, set out in the second booke of my Antidotarie. You may not forget in these woundes of the bellie to open a veine in the arme on the same side, and command

## A Treatise of Gunshot

the Patient to his quietnesse in bodie, and his perturbations and affections of the minde, so much as in him is possible.

Of the cure of wounds made with Gunshot in the partes called Artus, containing the armes and legges.

### Chap. 7.

**T**he cure of such woundes as happeneth to the armes and legges, is after the method set out before. For first you shall (the wound being made in the fleshy parte) with your probe search out the shotte, and with your crookes bill take it out. But if it haue well bene pearced through the member, and that you maye feele it in the opposite part, then cut the place, and take out the shot, regarding alwaie that you cut none of the great veines which lieth toward the skinne, but if the shot cannot easilie be found, you may not therefore cease the cure of the wound, but proceede in this manner.

If the holes of the shot doe differ and are distant, you shall roll fine lint together, and put it into the eye of your Probe made like an Peeble, and drawe it through the wound. But if the muscles do not suffer this, then you shall instill and powre into the wound the Unguent made with Butter, Decipitate, and my Egyptiarum, (whose composition is in the Antidotarie) and let it pearce into the wound. Then you shall make tents and dippe them in the same, and put into the orifices of the wound, and upon the partes round about you shall applie the medicine made of oyle of Roses, Sole armoniacke, and the white of an egge mixed together. This medicine you shall so long vse, untill you be past suspicion of inflammation, and other accidentes. And when there appeare signes of concoction, you shall put but one parte of Butter, and two partes of Vento. After which thinges done, the vse of this medicine is convenient.

Rec. Succ. Apij, Myriophylli, Terebinthinæ, ana. j. ounce.  
Mellis, ij. ounces, Farina fabarum Hordei, ana. ij. dragmes. A-  
rristol.



Aristolochia root halfe a pound and a halfe, Aloes, one dragma. y<sup>e</sup> first  
mire the powders with the saytes and bonie on a softe fire,  
then put in Turpentine. And in Summer, or whereas the  
Patient is of cholarike nature, in the place of Apium you  
may put the iuyce of Plantaine, or if you will more speede  
his curing, and oyle put to it Lithargium made in most  
fine powder, or all this waſhes many times, and dried and  
made in fine powder. And when as the wound is well moun-  
dified, you may use some incarnatine, as this fo: example.

Rec. Terebinthine, ij. ounces, Mellis, i. ounce, Aloes, Thur-  
is, Faring hordes, ana, j. dragma, Aristolochia, halfe a dragma.  
And now you must have regards to your tentes, that you  
dallie make them shorter and longer, and so cure the wound.  
But if it happeneth that through the violence of the shotte,  
not onlie the fleshy partes be wounded, but also the bones  
fractured and broken, then you shall use a double kinde of  
cure. For the infection must be cured as I have here be-  
foze made mention, and the bone fractures must be united  
and bled as is set out at large in the fourth booke of my En-  
chiridion. Having that you shall not use ligatures & splents  
in these kinde of wounds. But first you shal labour to take  
out the shot, next to remoue the contused and bruised flesh,  
then to procure the generation of newe flesh. After which,  
shall come the unitiō of the bones. And because you maye  
keepe the part without motion whilst as the bones are soy-  
ned, you shall use the instrument fo: fractured legges. And  
then cover the member with soft clothes, that it may be de-  
fended from the intulse of the aire.

Of the cure of those that are burnt with Gunne pow-  
der. Chap. 8.

**T**he cure of those that are burnt with Gun powder,  
doe require none other cure than if they were burnt  
with fire, or other flames. Wherefoze it were super-  
fluous to make mention of the cure of it in this place,

# A Treatise of Gunshot.

If it were not that those which be shooting in guns are sub-  
 ject to the flame of powder, & therefore I haue placed it with  
 this booke. Wherefore if the skinne be not yet vicerate, you  
 shall applye to the parte oyle of bitter Almondcs, oyle of O-  
 lmes with salt, or that which is in common vse, to take the  
 partes of the iuyce of Onions, and one part of barnish. But  
 if there be vicerations, then you must make this vnguent  
 following.

Rec. Olei oliuarum, ij. pound, Secunda: corticis Sambuci,  
 iij. ounces, Boile these on the fire, then straine them strong-  
 lie, after adde to them, Ceruss: halfe an ounce, Plumbi vli,  
 Lithargiri, ana. ij. dragmes. Mire these with a Leadens pestel  
 in a morter, and make thereof a liniment according to art.  
 But you must take heed that you open not the bladders for  
 the space of two or three daies, for when as they are opened,  
 at the beginning they bring dolour and paine. The in-  
 flamation ceased, and the accidents which maye  
 happen being put a waie, the rest of the cure  
 is as the cure of viceris, which  
 rieth according as the vl-  
 cer is simple or  
 compound.

Thus endeth the Treatise of Gunshot, compiled and  
 published by Thomas Gale, Master in  
 Chirurgie.

F O L I O

Of the cure of wounds that are hurt with  
 Gunshot.  
 The first thing that is to be done in such  
 wounds is to stop the bleeding, and to  
 cleanse the wound with water and wine.  
 Then the wound is to be dressed with  
 a liniment of oil of olive and salt.

# An Antidotarie conteining

hid and secret Medicines, simple and compound: as also  
all such as are required in Chirurgery: fully  
gathered and published, by Thomas  
Gale, Master in Chirurgery.

Antidotarie.

**W**hy with so coy and strange a looke  
dost thou me thus beholde?  
Am I vnknown vnto thy feet,  
or my vse manyfold?

Chirurgion.

Where as acquainted men be not,  
what should they saue and smile?  
I know you not my lookes it shew,  
I will you not beguile.

Antidotarie.

My Maister hath sent me abroad,  
to his great cost and paine:  
Willing me with Surgions to dwell,  
to their worship and gaine,  
If that but once my name you heare,  
you will me know certaine.

**ANTIDOTARIE**

which great treasures containe.

Chirurgie.

Antidotarie should I know,

but thy speech and aray

(Which yet I haue not hard or seen)

doth the contrary say.

Antidotarie.

In deede I was naked and bare

with errors like insectes

And barbarous names of medicines

to which I was subject.

R.v.

Boo



But lo, I am now garnished,  
with medicines of price,  
Which olde Hippocrates did vse,

And all my Master hath added me to,  
he hath added me to,  
And though my speech for want of vse,  
seemth somewhat strange to thee,  
Yet if leaving thou wilt embrace  
and acquaint thee with me, I may  
Familiar thus that me finde,  
easie to entertaine.

### Chirurgion.

Then give me leave thee to embrace,  
do thou with me remaine,  
And for thy sake I will not spare  
labour and tyme to spend.

### Antidotarie.

If thou so doe great gaine will bring,  
and men will thee commend,  
W. Cuthingham,

## Thomas Gale Chirurgion,

vnto the friendly Readers salutations,

W<sup>hen</sup> as I had finished my Institutions, Enchiridion, and Treatise of Woundes made with Cursthat, (loving Reader) I dyd right well perceiue that the precepts of the art in them contained, should not so farre extend and serue to fuel thy fire, as I dyd set out such medicinal instruments, as both are mentioned in the same booke, and of necessity are required in the art of Chirurgerie: as Unguents, Oyles, Balmes, Lotions, wounddrinckes, Emplaisters, Cetera, cataplasmes, Trochises, poufers,

ders, and such lyke. For although I haue set out diuers  
 approued medicines in other my booke, yet they be but  
 as an handfull in comparison to this Antidotarie, and put  
 forth there onely for exāple sake. Wherefore I haue drawn  
 in out of the most approued authors olde and new, such me-  
 dicines as be both easilie prepared, and of most effect and  
 vertue, adding hereto what I haue found profitable and  
 necessarie by long experience and practise. And although  
 perchance at the first it may seeme somewhat obscure and  
 hard) because I put the receipts and compositions in the la-  
 tine tongue) yet if you doe accustomedly vse to reade them,  
 and conferre either with the Apothecarie, wher as you doe  
 not perfectly vnderstand the same, or else vse the helpe of a  
 Dictionarie, they will be vnto you bothe familiar & plaine.  
 And thinke not that I haue done this (saying stealer) be-  
 cause I would make it more hard and difficult. But I did  
 it chiefly for that the latine names are vniuersally vsed,  
 and that there are an infinit number of simples which want  
 English names, and those (for the more part) that may be  
 Englished, are not vniuersally knowne through England  
 by that same name, because of the diuersitie that is vsed in  
 calling of simples, according to the countrey. And yet I doe  
 not omit to set out in the English tongue, as well the me-  
 thode and way of composition of such medicines, as I haue  
 placed in this Antidotarie, as also faithfully declared their  
 vertues and vse, for what causes they are intended, and for  
 what infirmities they serue, and in what manner.

And although it seeme hard, obscure, and difficult at the  
 first face, yet follow thou still the counsell of the wise doct,  
 who saith:

*Aliduo illis dum morbo laborantibus*  
 which verse may be Englished thus in this manner.

The watry droppe is most and soft  
 Doth persed hard stones with dropping oft.

in the tate (here written) the hard names of med-  
 ices by writinge to be perfected, I meane they will be  
 in tate and eate unto you, as possible may be. Now there  
 is no more but that thou wilt with the same good will  
 and without receive these my trauailes and expences, that I  
 freely doe offer them unto thee. So doing, I will not here  
 say, God willing, but participate other of my labours with  
 thee. And thus I bid the most heartily farewell, in Christ  
 our Saviour. At my house in London, the first day of Au-  
 gust, 1563.

# The first booke of the An-

atomye containing briefly the simples & com-  
 pounds answering to all the intentions

curative required in the art of Chi-  
 rurgie, by Thomas Gale, Master in Chir-

urgie, & Doctor in Physicke, &c.

Of medicines repercussive, both simple and  
 compound. Cap. 1.

**M**edicines which doe repel and drive backe  
 be of quality cold, and such as haue an ad-  
 stringent facultie, although they be hot. The  
 facultie springing by the right use of these,  
 is great. For we say by them the fluxe of  
 humours in their beginning. Whereof doeth

it followe, that we let the generation of inflammations, Apo-  
 plexies, Ulcers, Fevers, Colic, and paine. Of simple me-  
 dicines repercussive, these are some in most use. Waters ei-  
 ther fountaine or distilled. Rhenish, Burgis pastoris, Spinit,  
 Burllane, Plantaine, Coleworts, Wormwood, Centaurie,  
 Melilot, Pentaphylon, knotgrasse, Bonselets both great  
 & lesse, the leaves & tops of Borage tree, the Spittle tree,  
 Balaustie, Galla omphacitis, omphacium, vinegar, wilde Ap-  
 ples



ples and Beeres, Medlers, Service tree and fruit, Allum, Atramentum futorium, Cerasa, Litharge, Acatia, Bolus armena, Terra sigillate, Hypocisthis, Aloes, Amomum, Agaricke, Calcanthum, Crocus, Corall, Hematites, Ladanum, Myrrha, Chrysocolia, Cadmia, Cinabaris, Sanguis draconis, Spodium, Tragacantha, the Oke, Cypress leanes, and Wynter, Spanglage apples, and iuise, Pondane, Popie, whites of Egges, and such lyke. Among compounds these are numbred, which doe vayne backe and staye the flure of humours. Oyle of Roses, Cataplasmes made with the iuise of these hearbes, and with floure. Also cerotes, as cerotum e Psyllio, ceratum Rosaceum, ceratum Myrtinum, Dracalcitis, Oleum Rosatum vulgare, Oleum Rosatum Mesue, Oleum Rosatum omphacium, Oleum Cydoniorum Mesue, vnguentum santallini Mesue, Hydrelcon Galeni, Cataplasma Guil, Buttes ad phlegmones, vnguentum contra phlegmones & pruritus, vnguentum Pomphologos.

### Of medicines attractive, simple and compound.

Cap. ij.

**M**edicines which doe draw and attract be of hot temperature and subtile partes, they doe draw out of the inward partes, as when any behemous mattier is in the bodie. Also when splents, bones, scales, thornes, arrow heads, are fixed in any parts, it sucketh out superfluous moisture in dropsies, and such lyke sicknesses.

Medicines simple attractive be, Propolis, Sagapenum, ammoniacum, Opoponax, Galbanum, Euphorbium, Calx viva, Aristolochia rotunda, Lepidum, Mustard seede, Tithimallus, Pyrethrum, Cantharides. Also sterus columbium, Gallinaceum, anserinum, arietinum, and all such like fumes. Olde oyle, also Turpentine, Larigna, picea abiectina: and such like as haue a great vertue attractive: Of compound medicines they vse oyle of Mustard seede, Emplastrum apostolicum Nicholai, Oxyroccum, Emplastrum ex allijs Actij, and diuers other, which you shall finde in the second booke of the Antidotarie.

Of

Of medicines abstersiue, simple and compound. I A Cap. iij.

Such medicines as doe mundifie, and cleanse wounds, & suchie vlcers: are called abstersiues. Of which simple commonly vse, be Smallage, Roses, Plantaine, Scabious, Nettles, Belondine, Radix dracontij, Lupines, Aristolochia longa, & rotunda, Alume, Barley, and Beane flower, Flos iris, anagallis, Almonds, Sothernwood, Soperage, Asplemos, Wormewood, Betes, Camepitis, Parts horne, cortex Capani, Eleborus albus & niger, Dorehound, Parietarie, Waterian, toby, Honey, Staphisagire, Pistum, the compounds are Melicratum, Onyccratum, Oxyemel, Oemel, Precipitatus puluis, Vnguentum Egiptiacum nostrum, verde andromachi, Vnguentum Apostolorum, Vnguentum mundificationum Magistrale, and diuers other lyke.

Of resoluing medicines, simple and compound. Cap. iij.

When as through great fluxes there are humours impact in any parte, then we vse resolutive medicines: the Grekes cal them Diaphoretica, and they be of hot and moist temperature. The simples Diaphoretike, are these. Hot water, hot wyne, Oyles, that be hot in qualitie, Anthemis, Linsede, Fenegrake, Myntes, Peppe, Calaminth, Veneriell, Nettles, Balme, Bugwort, Camomil, Palowes, Melilote, Dill, Stichados, Marioram, Fumiterry, Wormewood, Enula Campana, Malwort, Helder, Valerian, Dorehound, Smallage, Coleworts, Beane, and Barley meale, Turpentine, Ladanum, Sagapenum, Galbanum, Opoponax, Bdelium, Ammoniacu, Coliphonium, Myrre, Frakenfence, and the grese of Gese, Capons, Hens, Cranes, Ducks, and such lyke. Among compounds specified in the second booke, these are numbred. Barbarum emplastrum, Emplastrum ex chalcitide, Triapharmacum, Diachilon albu, oyles of elder, Lilies, Dill, Camomil, Oleum

Oleum Rosatum compositum Mesue, Oleum Nardinum compo-  
positum Mesue, Emplastrum Hentici octauis, Emplast. Gul.  
Firmigonis militis.

Of medicines mollificative, simple and com-  
pound. Cap. v.

**M**edicines mollificative which properly in Greeke are  
named Malactica, are temperately hotte, without any  
manifest qualitie, either of moisture or drynesse. We  
use these medicines when as we will mollifie & make soft,  
bodies which be scirrhus and hard. Of the simples which  
doe mollifie, are these: All fatnesse, Butter, Ammoniacum,  
Bdellium, AttiPLEX, the rootes of Althea, Waxe, Colophonie,  
Femugreke, Cinamome, Saffron, Cypresse, Galbanum, Lyne-  
seede, Laudanum, Lorrell, Lilies, Mallowes, Opoponax, Oesi-  
pius, Piche, Psyllium, all Resines, the marroto of a Hart, a  
Calfe and Dre, Storax and Prepolis, and Oescelto.  
The chiefest compounds herein used, be Diachylon mag-  
num Mesue, Dialthea cum gummis Nicholai, Emplastrum  
de Melliloto Mesue, Diamecliton Andromachi ex Galeno,  
Emplastrum ex alijs Actij, Diachalcetons Galeni, Diachilon  
Mesue primæ descriptionis, Ceratum e styrace, Cyraftu gra-  
tia Dei, and such lyke, set out in the second booke.

Of medicines which doe suppurate, sim-  
ple and compound.

Cap. vi.

**W**hen as all hope is past by other medicines, then  
we take those in use which do suppurate. And note  
that generally the great inflammations for the  
more part, doe induce paine, and pallatiue dolour, & come  
at length to suppuration.

The simples which doe suppurate for the more part, are  
Althea, Beekholme, Araga, Butter, Calues talow, saffron,  
wax, Ammoniu, Begreke, wheate, barley, cole flower, & roots of  
B:lonie,



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**B**ylonic, white Rillie beads, Labdanum, Lyne seeds, Spallie  
che, Desipum, Rich, Frankensence, Rosine, Steyar, Figges,  
Stichados, Smyntum.

**O**f compounds which be of force in this case: are Pica-  
tum ceratum, Terapharmacum, Basilicon, viride Andromachi,  
Pastillus Musie, Emplastrum ex fremento Democrati, and  
diuers other which neede no rehearseall.

Of medicines causticke. Cap. vii.

**C**austricke medicines which doe remove, and take away  
filthinesse in blcers, and superfluous flesh, are Precipi-  
tate, Sublimate, Alome, es Viride, Calchantum, Sanda-  
racha, Arsenicum, Puluis noster secretus, vnguentum Egi-  
ptiacum, vnguentum Apostolicon Vigonis, Pastillus Andro-  
nius, Pastillus Polyide, Pastillus de Minio Ioannis de Vigo,  
Ceratum Viride Iamerici, Aqua corrodens, Aqua Mercuria-  
lis, and diuers other which were superfluous to rehearse; se-  
ing they are readely founde in the second booke, or else in  
the table belonging to the whole worke. And that I haue  
here in this place remembred the chiefe and principal Cau-  
sticke medicines, which are most in vse in these our daies.

Of medicines which do assuage dolour & paine:  
both simple and compound.

Cap. viii.

**M**edicines which doe cease dolour and paine, (called in  
Graeke Anodyna) be Will, Woyme wood, Gladine, A-  
garike, Cardamome, Chamomille, Centaurie, Chame-  
petis, Eranthis, Dandel, Iris, Persely, Rosemarie, Juniper, Mi-  
hium, Opoponax, Althea, Rew, Scerpillum, Lynceede, Hyof-  
ciamus, Eygges, Castorium, Cardamome, Agallochum, Atri-  
plex, Scerpillum, Fenegreke, Peucedanum, the white of egges,  
and such like.

**A**mong compounds, these are in vse, Butter, oyle of Ro-  
ses, Violets, Phar, Popye, Lettise, Pursulane, Oleum, Masti-  
chinum Mesug, Oleum Populum Nicholai, Oleum Hype-  
rici,

rici Magistrale, Oleum Mandragore Nicolai, Oleum Lumbricorum, Vnguentum inrigidans Galeni, Ceratum Oxyroceum Nicolai, Emplastrum de Speciebus, Cataplasma D. Gul, Buttes ad dolorem sedandum, And such lyke.

Of Medicines incarnatiue, simple and compound.

Chap. 9.

**M**edicines incarnatiue which doe also engender flesh, are Aristolochia rotunda, Frankensener, Ladanum, Aloes, Cadmia lota, Pompholix, Amylou, Manna, Myrrhe, Storax, Spodium, Turpentine, Colophonia, Chrysocola, Piche, Christallus, Oesypus.

Of compounds they be Viride Galeni, Theriaca, Aureum Mesue, Fuscum Nicolai, Tetrapharmakon, Dia Inios, Pulvis Rafis, Vnguentum Basilicon Mesue, Ceratum Viride Iamarici, Vnguentum incarnatiuum Bmiliucensis. And diuerse other set out both in the Enchiridion in their proper places, and also in this second booke.

Of Medicines which doe cicatrife simple and compound. Chap. 10.

**M**edicines which are to be vsed to cicatrife an vlcere, when as it is filled with flesh, are these: Aloes, Bolus armena, Allouie, Aristolochia, Anadum, Balsamita, Bdellium, Anagallis, Centoriz, Canepitis, Chaudois, Cadmia, Eupatorium, es vltum, Acacia, Gentian, Gypsum, Iris illirica, Licium, Lupines, Mel coctum, Myrtius, Myrrhe, Lithargyrum, Plantains, Pentaphillon, Paper combust, Sanguis Draconis, Sarcocolla, Syzumi, Sandaracha, Terra Lemnia, Symphilton maior, the leaues of Elder, Frankensence, Tormentill, Hernaine, Ceruse, Cupresse galls, Tutia, and such lyke. The compound are Dia cadmia, Dia ladani, Vnguentum album Rafis, album e Cerusa, vnguentum Pompholigo, Pulvis Epuloticus, Vnguentum Nicolai, being the sequenth vnguent set out in the second booke. Diapipercoos Galeni, Dia Dictamn, Eiusdem, Emplastrum Calificense, Emplastrum Gul,





Salues, Emplaisters, Cerotes, wound, drinke, &c. of mine  
owne invention. And here note, that there is a difference be-  
twixt the Grecians and the later writers, touching the  
names of these compound medicines. For the Grecians did  
call unguents onlie Armatike Oyles, wherewith they did  
annoint the bodie. The Cerotes they called such medicines  
as receined into their composition oyle and ware, Emplai-  
sters be medicines which take into their composition diuers  
kinds of simples, but chiefeleie mettalline bodies, and these  
are so long to be boiled together, untill they will no longer  
besile and cleaue to the hands. Cataplasmes be medicines  
standing on Hearbes, Flowers, Oyles, Cabbage, Barlie,  
Dates, Beanes, and other flowers, which are not so long to  
be boiled on the fire as Emplaisters are. Trochisce be com-  
positions made round, and were deuised to keepe long time  
such simples in their force which doe enter into their com-  
positions.

Doobers be medicines beaten and made subtil and  
fine like incoates of the Sunne, as they call them. Waters  
are prepared diuerse waies by the arte of Alchimie. Doctor-  
tions, Lotions, and Inunctions, be liquors and other things  
boiled together and then strained. What quantitie of eu-  
erie simple should be admitted to euerie forme of composi-  
on, cannot in generall rules be set out, but hath varie accord-  
ing to the curative intentions. Bestiallar formes of com-  
poundes, such as be of most pitee, and also that followe  
in this second Booke: as also their waies to make them,  
and to what use they serue, beginning first with unguents.

The description of an unguent called Mithridate  
of Galienus

**R**ec. Olei Rosati omphacini, j. pound, Cera Alba, three  
ounces.

Thou shalt melt the waxe in the oyle, then wash it  
often with cold water, untill it cometh to white colour. Last  
of all wash it with water of roses, & put to a little portion of  
vinegar,

## The second booke of

vinegar. It is good to refrigerate hot burning fevers, and the heats of the liver, it allwaies the pains in the head. It must be anointed upon the ridge bone, or spine of the backe, upon the temples, and on the region of the liver.

### Vnguentum ad ambusta.

Rec. Olei rosati, vii. ounces, Olei ex olis, ii. ounces, Nitri albi puluer, ii. ounces, Gummi albi, one ounce and an halfe, Corticis mediani Sambuci, m. Make hereof an vnguent with a soft fire according to art. It is verie good in burnings and scaldings, and like affeers.

### Vnguentum de Artanita manus Mesue.

Rec. Olei irini, ij. pound, Succu Ciclamini, ij. pound, Cucumeris agrestis, j. pound, Butyri, j. pound, Pulpa colocinthidis, iij. ʒ. Polipodij, vi. ʒ. Euphorbij, ʒ. ʒ. Use those that are to be brused, and let them be infused in a hessel of glasse with the sugres and oiles eight daies, then make them hot in vafe duplici, & straine them, then adde Sagapeni, vii. ʒ. & ʒ. Myrthe, ii. ʒ. These must be dissolved in vinegar, and boile all in the decoction afoze said, untill the sugres be consumed, then adde to it Cerx. v. ʒ. Fellis vaccini, vii. ʒ. and ʒ. Make all so hot that the waxe may melt, after put into it by little and little the powder following.

Rec. Scammoni, Aloes, Colocinthidis, Mezereri, Turbith, ana, vii. dragmes, and a halfe, Salis gemmae, iij. dragmes, and a halfe, Euphorbij, Piperis longi, Zingiberis, Chamemeli, ana, iij. dragmes, Misce et fiat vnguentum. It prouoketh vomitte being anointed on the stomack, but on the nauell it maketh the bellie loose, so that it is good against dropsies, for y<sup>e</sup> it doth much expell cerous humors, it doth also kil wormes, and is used in such bodies as are not able to take anie purging medicines inwardlie.

### Vnguentum Rosarum Mesue.

Rec. Amyglae pominae, j. pound, and also it nine or ten times in hot water, and as often in colde. Then you shall adde to it Rosarum rubrarum recentium, one pound.

Macerate

Macerate them and let them stand together seven daies, after  
boile them with a soft fire, then straine them, and after  
put so many new roses, and doe as you did with the first.  
Then take so many more new, and so the fourth time, do-  
ing alwaies as with the first roses. Then adde Succ. rosa-  
rum rubarum, vj. ounces, Olei amygdalarum dulcium, v. oun-  
ces, Boile all on a soft fire, vnto the consumption of the iuyce  
of Roses, then straine them, and reserve it to that vse. A-  
lii addunt. Opij one dragma. It cures Inflammations, Her-  
pes, and Crispelas, and is good against the head each com-  
ming of heate. It doth all waie the hot distemperance of the  
Stomack and liver, Vnguentum album Auicennæ, Vnguen-  
tum de cerusa dictum.

Rec. Lithargyri, j. dragma, Ceruse, v. dragmes, Cera alba,  
vij. dragmes, Olei Rosati, ij. ounces, Albuminis ouorum nu-  
mero, j.

The ware being molten in the oyle with a soft fire, put  
in your litarge and Ceruse well beaten and searced. Mixe  
these, and last of all you shall put in the white of an egge.  
This vnguent is good against abscession, Itabs, and blcers.

#### Vnguentum de Tutia Magistrale.

Rec. Olei Rosati, Olei omphacini, ana, vj. ounces, Olei Myr-  
tini, Vnguenti Populei, ana, ij. ounces, Foliorum Plantaginis,  
Solani, ana, m. ij.

The herbs being well cut and brused, mixe them with  
the oiles, letting them macerate together eight daies. Then  
boile them a little and straine them, which done, you shall  
adde of Cera alba, iij. ounces and a halfe. Boile them vntill  
the ware be molten, stirring it with a slice. And take it frō  
the fire, adding to it of Lithargyri, vi. ounces, Pompholigos si-  
ue Tutia preparata, Ceruse trita, ana, ij. ounces, Plumbi vsti  
vi. ounces, Caphura, j. ounce. Put all in a Leaden morter, &  
let it be stirred two houres continuallie. After put it into a  
bottell of Glasse, and reserve it to the vse.

Aliud simile Nicolai

Rec. Olei rosati, Cera alba, ana, vi. dragmes, Succ. solani,

L. iij,

j. dragme,



## The second booke of

j. dragme, Ceruse lotz, ij. dragmes, Plumbi vñstet lotz, Tutia preparate, ana, j. dragme, Thuris, halfe a dragme.

Melt the ware in the oile with a soft fire, then put them in a leaden morter, and put the pouders into them, continue allie stirring them. And then put to the wyces of the hearbe, stirring it still for the space of six houres.

These three vnguents are excellent in curing Crispe-las, filthy blcers, also for blcers of the legs, & to fill the holes to and empty parts, it doth furthermore refrigerate & cicatrife.

**Vnguentum de Lychargino.**

Rec. Lichargyi, ij. ounces, Ceruse halfe an ounce, Aeti, j. ounce, Olei rosati quantum sufficit. Make these in an vnguent with a soft fire, it cureth blcers and excoriations made thorough riding, straitness of the shewe, or otherwise hapning.

**Tripharmacum eiusdem Mesue.**

Rec. Lichargyi, Aeti forth, ana, iii. ʒ. Olei communis, vii. ʒ. Let the Licharge be finely powdered, and put to it the oyle and hiegeer, and stirre them continually. It is of like vertue with the vnguent going before, for it healeth scabs and blcers of the skin, and such like.

**Vnguentum ad Scabiem.**

Rec. Syracis liquida, Terebinthine lotz, Butyri lotz, ana, vij. ʒ. Succu limonum, i. ʒ. & ʒ. Hellebori nigri puluerisati, i. ʒ. Salis, ij. ʒ. Mixe them together, and make therof an vnguent according to art.

It hath the like vertues with the vnguent going before.

**Vnguentum de Minio.**

Rec. Minij lavissime triti, ij. ʒ. Olei rosati, Olei Myrtini, ana, ij. ʒ. Coquantur lento igni cum Ceræ albæ, halfe an ounce. Make and vnguent thereof according to art.

**Aliud de Minio Camphoratum.**

Rec. Minij triti, iii. ʒ. Lichargyi, ij. ʒ. Ceruse, j. ʒ. & ʒ. Tutie Camphoræ, ana, iii. ʒ. Olei rosati, p. i. and ʒ. Ceræ albæ, ii. ʒ. The ware being molten in the vile upon a soft & gentle fire, put it in a leaden morter, and put the other simples made in  
molt

most fine powder into it, and stirre them continually for  
 20. This balm is good against all the maligne blcers,  
 such as will hardly be cured, & in such a mode  
 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.

Rec. Cerae fluxa, Resina pinguis, Picis graeca, ana. i. pound:  
 Olei communis q. Fiat vnguentum luto igni. Some put Tur-  
 pentine to it, some in the place of it doe put pitch.

This vnguent shewereth to the vertues of Basilicon mi-  
 nus, but it is more weake. Wherefore it is more apt for  
 greene wounds of the head and neruous partes, and blcers.

Vnguentum Basilicon minus Mesae Galeni En-

Rec. Cerae alba, Resina pini, Sopi vacini, Picis Graeca, Pi-  
 cis nigra, Terebinthina, Thuris, Myrrha, ana. 3. Olei com-  
 mune q. Fiat vnguentum.

Such blcers as be without inflammation in neruous &  
 sinewie partes, this vnguent filleth with flesh, & incureth  
 verie well.

Vnguentum fuscum Nicolai.

Rec. Olei. i. pound & 3. Cerae flavae, iii. 3. Picis Graece, Picis  
 nigrae, ana. ii. 3. Mastiches, Galbani, Thuris, ana. i. 3. Sagapeni. ii.  
 3. Terebinthinae. i. ounce; Fiat vnguentum.

This vnguent hath a power & vertue of healing & attrac-  
 ting.

Vnguentum Capitale Compositum.

Rec. Gummi elemi. iii. 3. Hammomaci. ii. 3. Terebinthinae,  
 Resinae pini, ana. iii. 3. & 3. Cerae q. Make of this an vnguent,  
 & let the gums be dissolued according to art, & so long boiled,  
 untill they come almost into the forme of a cerote.

Vnguentum e Caprifolio Capri.

Rec. Terebinthinae, Resinae pini, Cerae flavae, ana. iiii. ounces,  
 Olei rosati, vii. ounces; Mastiches, Thuris, ana. one ounce,

L. iiii,

Gummi.

## The second booke of

Gummi eleui, ij. ounces, Caprifolij, Betonicæ, ana, iij. ounces,  
Vini optimi, x. pound. The Willowbinde and Betonie being  
stamped, let them stand infused in wine foure and twentieth  
houres. Then adde to them all the other parcells, except the  
Gumme, Frankensence, and Mastike, boile these on a cleere  
fire, untill the halfe part of the wine be consumed, and that  
it beginneth to waie graine, then straine it and let it coole.  
Then boile it againe untill all the wine be consumed, then  
straine it againe, and then boile it, and adde the rest of the  
parcells in fine powder, and then put it in a colbe place, and  
reuerse it to the use.

This is a right excellent medicine in woundes of  
the head.  
**Vnguentum Calce magistrale.**

Thou shalt enerie daie once wash the Chalke, and let the  
water be taken awaie with a Spunge, doe this ten dayes.  
Then washe it with Rose water, and let it drie, and then  
Rec. Huius calcis ita extincte, three ounces, Olei rosati, one  
pound, Cere alba, three ounces.

Melt the waie in the oyle, then taking it from the fire,  
put the Chalke made in most fine powder, vnto the oyle and  
waie, and make an vnguent of them according to art. This  
vnguent is good for burnings and scaldings.

**Vnguentum Populeon Nicolai.**

Rec. Oculorum Populi arboris recentium mense Martio  
collectorum, a pound and a halfe, Axungie porcine præpa-  
rata, iij. pound.

The Pople budde must be brused, and mixed with  
your Axungia, untill your other hearbes may be prepared,  
then adde to it Foliorum Papaveris agestis, Foliorum Man-  
dragoræ, foliorum Hyoscyami, foliorum Solani, foliorum ver-  
micularis, aut. Crassulæ, foliorum Lactuæ, foliorum Semper-  
uiui, foliorum Bardanæ, foliorum Portulacæ, foliorum Viola-  
ræ, foliorum Vmbellæ viciis ana. iij. ounces.

These hearbes must be mixed & tempered with Spungia,  
then



then take of Wyne a sufficient quantitie: Boyle them to the consumption of the wyne, then straine them and make of them an vnguent according to art.

It is meruailous precious against raging heats in fevers, and it promoketh sleepe, the temples being annointed with it. &c.

**Vnguentum Dialthæa simplex Nicolai.**

Rec. Radicis althææ, two pound. Seminis Lini, Fœnogreci, ana, one pound. Olei, foure pound. Ceræ, j. pound. Terebinthinæ, two vnces. Resinæ, vj. vnces.

Let the rootes be cut and bzused with the seedes, and stande thre dayes in eight pintes of water: then boyle them and take two pound of the Pusilage & bottle it with the other thinges, untill all that is waterie be consumed. And make thereof an vnguent according to art.

This vnguent doth mollifie, heate, and make moyst.

**Vnguentum Dialthæa cum Gummi Nicolai.**

Rec. Radicum althææ, two pound. Seminis Lini, Fœnogreci, ana, one pound. Pulpæ scillæ, vj. vnces. Olei, foure pound. Ceræ, one pound. Terebinthinæ, two vnces. Resinæ, Picis Græcæ, ana, vi. vnces.

Make an Vnguent as is aforesayde, then adde to the Gummes following, first being dissolved in Wineger.

Galbani, Gummi Hedere, ana, two vnces.

Mixe them well, and reserue it to thy vse.

This vnguent properly helpeth the paine of the brest, coming of colde, and the Plurisie, and healeth all partes of the brestes, which are refrigerated, it doth moysten, mollifie and make hot.

**Vnguentum Santalinum Mesue.**

Rec. Rosarum rubearum, one vnce. Sandali rubri, j. vnce, ij. dragmes. Sandali citrini, Sandali albi, ana, vj. dragmes. Spodij

L.v.

halfe

## The second booke of

halfe an vnce. Caphura, two dragmes. Cere albe, three vnces  
and dragmes. Olei Rosati one pound. Boli armeni, vii. dragmes.

You shall melt the Oyle in the fyre; and wash it often  
times with colde water, after that all your other perrets be-  
ing made in fine powder, you shall put them together and  
make a fine vnguent according to art.

It both extinguisht and put away all inflammations of  
the liuer and stomacke, and other parts of the bodie.

### Defensium Magistrale.

Rec. Boli armeni, Sanguinis draconis, Terre sigillate, ana  
one vnce. Olei Rosati, vj. vnces. Cere, one vnce and a halfe. A-  
ceti, foure vnces.

Mixe the oyle, vinegar, and waie together, untill the  
vinegar be consumed. Then taking it from the fyre when  
as it begin to refrigerate and waie colde, put to your other  
parcells made in fine powder, and reserve it to the vse.

### Mundificatium Magistrale.

Rec. Mellis Rosati colati, i. ounce and a halfe, Terebinthi-  
ne clare, iii. ounces, Succij Apij, Succij Prasih, ana, six dragmes,  
Succij absinthij, two dragmes.

Simul coquantur, deinde addentur.

Farine, Hordei, farine Fabarum, ana, vi. dragmes, farine Lu-  
pinorum, farine Orobi, ana, iii. dragmes, Sarcocollæ, Myrrha,  
ana, i. dragma and a halfe.

Bring them into powder and make an vnguent accord-  
ing to arte. And this vnguent is right excellent to muni-  
fise a wound or filthy vicer, and thereof it is called Mun-  
dificatium Magistrale.

### Vnguentum Viride Andromachii ex Galeno.

Rec. Resinæ pini, ii. pound, Cere, i. pound and a halfe, Olei  
communis, viii. ounces, Aeruginis eris, iij. ounces.

You shall put the wolen and waie into the oyle & melt  
them.

them together, the put to your Crugoerls made in fine powder, and make thereof an vnguent as art requirerth, it healeth greene and fresh woundes, and such like, &c.

### Vnguentum Apostolorum Auicennę.

Rec. Cerę albę, Terebinthinę, Resinę, Hammoniacı, ana, .i.iii. dragmes, Aristolochię longę, Thuris, Bdellij, ana, .vi. dragmes, Myrrhe, Galbani, ana, foure dragmes, Lithargij, .viii. dragmes, Opoponacis, Aeruginis, ana, two dragmes, Olei communis, two pound, Hieme vero, three pound.

You shall dissolue your gums in good white vineger, then put them to your oile, ware, Rosen, Turpentine, and Litarge, and boyle them on the fire vnto the consumption of the Vineger. Afterward the other percelles being made in fine powder you shall also adde, and make an vnguent according to art.

It is of great force against woundes and blisters which are hard to be cured: also for fistules, it taketh away deade flesh, and restoreth in the place sound and new. It doth moue life and heale, &c.

### Vnguentum Egiptiacum Mesue.

Rec. Aeruginis, siue dragmes. Mellis, .xiii. dragmes, Aceti albi, .vij. dragmes.

Boyle these on the fire, and Exyre them, so long untill it be red. Other take of this vnguent, sixe vneces.

Rec. Calcanthi ysti, two vneces. Olei Rosati, .ii. vneces. Cerę, quantum sufficit.

Make all in an Vnguent according to art. This is right good against olde wounds, fistules, and also it taketh away superfluous flesh, and doth vehemently exccrate and drye.

### Aliud Ioannis de Vigo.

Rec. Aquę plantaginis, Vini malorum gran. Mellis, ana, two vneces.

Alumi-



58 The second booke of

Aluminis rupis, Aeruginis, ana. x. dragmes.  
Boyle these together, and styre them so long until that  
it waxe redde, then reserve it to the vse.  
It serueth to the lyke effects as the other before.

Aliud Guydonis,

Rec. Mellis, one pound. Aceti optimi, vi. vnces. Aeruginis,  
one vnce, Aluminis rupis, v. dragmes.

Boyle and styre them so long together until they wax  
redde. Then let it coole, and keepe it to thy vse.

Vnguentum defensivum & repercussivum  
Brunswicensis.

Rec. Olei Rosacei, iij. vnces. Boli armenij, vnces. Terre  
sigillatæ, Foenogreci, ana. i. vnce. Caphuræ, i. dragme. Solatri,  
Semperuini, ana. i. M. Cere, two vnces.

Boyle the herbes and straine them, and put them to the  
other things: and make of all an vnguent according to art.

This vnguent is bled to defend wounds from acerbets.  
Also in the beginning of inflammations, to cease or rather  
let the fluxe of humours.

Vnguentum incarnativum eiusdem.

Rec. Turbithing, iij. vnces. Mellis, halfe an vnce. Olibani,  
one dragme. Croci, one scruple. Olei Rosacei, Cere, q. s.

Make herewith an vnguent according to art.

It is a right good incarnative, promoting and causing  
flesh to grow in all manner of wounds, &c.

Vnguentum ad phlegmones & pruritus,

Rec. Olei rosati, three vnces. Infrigidantis Galeni, Vnguētī  
Rosarum populionis, ana. i. vnce. Succī plantaginis, Semper-  
uini, Vini granatorum, ana. halfe an vnce. Aceti Rosarum, two  
dragmes. Lithargiri auri, Argenti, ana. i. vnce and a halfe.

Ceru-

Ceruse .v. dragmes, Tutie .i. dragme.

Put the oyle, the iuyces, vinegar and wine into a mortar of lead, and labour them well, and put thereto the mercurall in fine powder, and when they are well wrought, put thereto the vnguments, and worke them all together, and so make your vnguent.

This Vnguent is for itche of the legges and inflammation, excoriation, burning and blistering, continuing of hot humours, and for hot and sharpe plications, &c.

### Vnguentum Phompholigos.

Rec. Olei Rosati .x. vnces. Cerę albę three vnces. Succı Solatri .viii. vnces. Ceruse lota .iiij. vnces. Plumbi vsti, Tutie ana, two vnces. Thuris .i. vnçe.

Boyle the iuyce of nightshade with y oyle, till the iuyce be consumed, then put to the war, and when it is reletted and set from the fier, so that it be nere cold, put thereto the Cerusa, burnt leade, Tutia, and Thus, made in fine powder, and searfed through a fine searce, wyre them well together and keepe them in a tinne pot. &c.

This vnguent is not onely good in drying bp of blisters of the leges and other places of the bodie, but it is also an excellent remedie, to preserve a canker plicate, that it go no further, & also a singular good remedie, for all other Cancerous plications, both in the brest and in all other places of the bodie.

### Vnguentum Nicolai Florentini.

A speciall vnguent for the crampe, if the patient haue no feuer, it was practised by Nicholas Florentine.

**T**ake a fatte Gose, and take out hir bowels, then take a Catte and cut hir in small peces, and put the same peces into the belly of the Gose, with small peces of Bacon, Myrbe and Frankensence mingled all together, then sew up the belly of the Gose, and put hir on a spit, and roste hir at a soft fier. Set a dylipping panne vnder hir with Vineger and white wine, and when the water of the Gose is

is dropped away, then let the fat drop into the vinegar and the wyne. After take the fatte that swimmeth above the vinegar and wyne, and keepe it in a hessell, and boyle the Oyle againe in the foresaid Vineger and wyne, and much fat will come from hir againe, and then take this fat and mire it with the first that dropped from hir. And with this vnguent annoynt the member which hath the crampe, for it is very precious, and hath vertue to seace paine, to wast consume & drye by euill humours, and to comfort the members, if some of this vnguent be put into the vnguent, vled in Chameleontias, it helpeth very much, and doth seace the paine of that contagious sicknesse.

Vnguentum Ioannis de Vigo, contra Cham-

leontiasin.

Rec Olei, one vnce. Vnguenti pro spasmo, two vnces. Angie porcine iij, vnces. Olibani, halfe a vnce. Euforhij, one dragme and a halfe. Vnguentum de althea, Vnguentum Agrippae, ana i vnce. Argenti Viui, iij, vnces.

Let all these be beaten together in a mortar of Iron or Stone, tyll no parte of the Argenti Viui, be seene, but see thou mortifie the same firste in a litle glasse with Vineger and fasting spetfell, that it may the more easely mingle with the foresayd thinges, and doe lesse hurte in the working, let your Olibanum and Euphorbium be made in fine powder, and searled fine before you mire them with the foresayd thinges. Provided alwayes that the matter antecedent be digested, & sufficiently purged, before they lay this vnguent on the body.

Aliud Vnguentum pro eadem Chameleontias.

Note that this vnguent according as Nicholas Massa, and other notable writers both olde and newe both testify, it doth heale not onely the paynes of that same contagious sicknes, but also the breaking out of those that be scabbed, it resolueth harde Apollumies which is called Grumas, bunches, or harde knots of the sinowes of the armes and of o-  
ther



ther places, also it healeth blcers of euill curation or hard to be cured. This vnguent must be applied vppon the legs, the armes, and vppon the ioyntes, chiesly in the hammes in the bowling of the armes, the wyelle of the handes, the wyelle of the fote, & the soles of the fete. Also you must annoynt the sores therewithall, but beware yee lay not this vnguent nigh the principall partes: as the breste and the stomacke, but you may annoynte the shoulder blades, the buttockes with it, & if neede be yee may lay a little on the foreheade, and this is the making of it.

Rec. Axungie porcin the little skinnes taken from it without melting of the fire. ij. pounce.

Argenti viui, ij. pounce. Lytargyn, iij. pounce. Ceruse, iij. vncces. Olibani, j. vncc.

Mixe all these together, and make thereof an vnguent, in a mortar, but firste of all you must beate the swynes grease & the Argenti viui together very strongly, then put in the other thinges in fine pounce, and labour it wel with your pestell vntill it be so fine that none of the Argenti viui be seene. Note that this vnguent is the chiefe matter of all the curation of this disease, for because you may mixe other medicines, with this medicine according to the diuersitie of the sicknesses that the patient hath: as for example, If the sickness came with hard swelling, adde Capons grease, Duckes grease, or Goose grease, and sometime you may adde all these thinges; and sometime one, as you see cause, for with their hotnesse and moistenes they doe resolue the hardnesse, and so comforte the hurt member, and if it chauce that there be swelling with great paine, you may adde Oyle of Lilies, of Bayes, of Dill, and Marjoram, either one of them, or more as yee see cause, for they be stronger in operation, and their vertue is greater.

Also if the disease be malignant or virulent, that the Patient may not bee altered or holpen with a light medicine, put in more of the Argenti Viui, and adde thereto Aqua vite, Sage, Suchados, Treacle, Myrrhe and Mallice.

It is to be feared of excoiation that may come by the strength

strength and corrosion of the Argentum vinum. Therefore we correct this vnguent with Lythargin and Cerula, as we haue written here before in this vnguent. And as you doe finde diuers things added vnto this vnguent, so doth it reemoue diuers accidents and sicknesses. But beware you misse not this vnguent without discretion, for euen as it doth helpe this contagious disease being rightly vsed, so being vsed without discretion, it doth kill and destroy.

Provided alway that this be not ministered without purgation and digestion of the matter antecedent. The patient may not goe abroad after his sweating, vntill such time as his mouth be whole, and must vse good lotions, or washings for his mouth, vntill it be whole.

*Tertium vnguentum pro Chameleontasi.*

Rec. Laureole, Ablinthij, Fumarie, Centaurij, ana. m. s. Euphorbij, Elebori albi, ana three dragmes. Colocinthidis, two dragmes.

Boyle your herbes, your powder and Coloquintida altogether, your herbes being a little brused in a mortar, and your Coloquintida broken in small peeces, in one quart of good Maluise, till the halfe be consumed, then let it stand a day and a night infused, and straine it and ad therevnto: Succu Ruta, Saluie, Ebuli, ana two vnces. Then take Axungia, xij. vnces, Ping. Anatis, Caponis, ana. iij. vnces, Oyle de Bay, vi. vnces, Lithargin auri, Oliban. ana two vnces, Mastiches, Aloes cicatring, Scammonia, ana halfe an vnce, Argenti, viii. vnces.

Make all these things that are to be made in powder, in fine powder, and mixe your Argente vine, with fasting spetle, or with iuice of Limons. Then beate all your sayd things together, putting in your iuice and your decoction together by little and little, continually labouring it in a mortar, vntill it be brought to a perfect vnguent.

This vnguent must be applied vpon the legs, & armes as other vnguents be that serueth for the same disease. And if you will haue them more lasative, anoynt the navill therewith. It taketh away apostumes, blcerations & breasting

bring out of the hedges and valleys and pines springing of  
the same richness, to grow in, when add to this, and it will be sold

**Aliud vnguentum pro eadem Chamaeleontia.**

**Rec.** Matetis, Cinnamon, Gariophil. ana, halfe an ounce,  
Granorum paradisi, two dragmes, Foliorum rosearum, rub.  
Corticum Limonium, ana, five dragmes, Nucum must. numero  
foeten.

Let all these be beaten together and laied in stepe in  
Rose water the space of one daie and one night, then put  
into the same water and spices, of Swines grease and refine  
the pound. Boile them together untill the water be  
consumed, and straine it. Then take of the same li pound,  
Argent. vii. seauen ounces, Oliban. two ounces, Mastiches,  
Cernise, Lithargyri, ana, one ounce and a halfe, Sacchados,  
Myrrhe, ana, halfe an ounce.

And in the ende put of this he resolved in Oyle of Ro-  
ses halfe a Scruple. And let these be mixed together and  
make thereof a fine vnguent according to arte, as is afore-  
sayde. And this vnguent is for rich and delicate persons,  
and is also meruallous in operation, and must be vled as  
these are, which serueth for the same infirmities.

**Vnguentum Aegyptiacum.**

**Rec.** Mellis, two pound, Aceri fortis, one pound, Viridis  
zeris, four ounces, Aluminis, three ounces.

Boile all these together on a softe fire, untill it be red, for  
if you boile it too much, it will be black, and if you boile it  
too little, it will be greene. Therefore when it is boyled  
enough, it will be perfectly redde. This vnguent I haue  
found greates profite in so manye sores, for it taketh away  
rotten flesh without anye great paine, it doeth also profite  
much in fistules, and hollowe vlcers, if it be mingled with  
some convenient liquor, and conueyed in with a syringe.  
It doeth also abate and take awaie spongyous flesh both  
in woundes and in vlcers, and maketh them come to easie



Medication, and this Unguent is much praised; both of the  
olde Masters, and of the new, in many other things.

*Unguentum Dialthea.*

Rec. Radicum althee, two pound, Sem. Lini, Foenograci,  
ana, one pound; Olei communis, foure pound, Cere, one  
pound, Terebinthina, Galbani, ana, foure ounces, Gummi he-  
dera, two ounces, Colophonij, Petrosin, ana, halfe a  
pound.

Wash your rootes cleane, and bruse them in a mortar,  
and bruse your Lini-seeds and Foenogracie also; and put  
thervnto of Scilla brused, halfe a pound, put vnto all this  
eight pintes of water, and let them stand three dayes, and  
the fourth daye boyle them on the fire till they beginne to  
beare thicke. Then put them into a pot, and when you wil  
straine it, put thervnto some hot boilling water, that it may  
the better be strained, then take of this masellage by strai-  
ning two pound into a balke, and put vnto your Dyle of  
Torsaype, and let them boyle vntill the masellage be con-  
sumed. Then put thervnto your Ware, yea Turpen-  
tine, your Galbanum and Gummi Etere, dissolved in Vi-  
neger and strained, then your Petrosin molten with a little  
Dyle of Lillies, and last of all put in your Colophontum in  
fine Powder, continuallie stirring all these together til they  
be colde, and so kepe it.

This vnguent called Dialthea, is a speciall remedie for  
all paines of the breast that commeth of colde, if the breast  
be therewith all anointed, and warme clothes layed there-  
upon. It is good also for the Blaslise, and is very resolue  
and molliche, which are required in both these diseases. It is  
good also for the sinking of sinewes and tendons, and also  
for crooked ioyntes, for it immediately and supplely them  
gentle, so that it maketh them easie to be brought to a  
shape. In many other good properties it hath in doing of  
such like things.

## Vnguentum defecatum Rubrum

**Re.** Lapidis Calaminaris, Tere sigillat, Rosetana, foure ounces, Lithargyri auri, Ceruse, ana, three ounces, Gumphorae, one dragma, Cerefolia, iij. ounces, Oleum Rosatum, Violarum, ana, iij. ounces. **Do.** Wash your Lapis Calaminaris, Litharge, and Ceruse, and drie them againe, and make all these in verie fine powder, that is to be made in powder, then melt your Oyles with your Vncre, and in the cooling put therein your Powders, continuallie stirring it with a splatter untill it be colde, and so keepe it to your vse. Some doe adde vnto this vnguent Oyle of Penuphar, one ounce, Olibanum & Mastike, ana, one ounce, and if you do so, it is the better.

This vnguent is verie good to drie by ulcerations, and chiefelie of the legges, after that they be mundified, and the flesh well incarnate, for otherwise it profiteth not, for it serueth for no other purpose, but onelie to drie, and defend humours, and to make perfect cicatrification.

## Oleum Rosatum

**Re.** Olei communis, foure pound, Rosarum rubrarum purgatarum, xvi. ounces.

**Do.** Macerate them, and let them stand in the Sunne eight daies, then take out the Roses and straine them. After put in newe Roses, and let them in lyke manner stand eight daies, and straine them as afore. And doe so the third time, and reserue this to thy vse. Some vse to let the Roses remaine in the oyle the last time.

It doth refrigerate and is astringent, and helpeth inflammations in the partes of the bodie, and it healeth the corrosion of the intestines ministred in Clusters, and healeth the paine of the teeth, they being washed therewith.

## Oleum Rosatum completum Mesue.

Rec. Olei ex oleis maturis, aqua fontana multoties loti quantum voles.

Put into this oyle of redde Roses leaues so many as you shall thinke conuenient, let these in the Sunne eight dayes, then boile them in a double vessel on the fire three hours. When straine them. And after take new roses, and doe as afore is said. And doe so also the thirde time. After put to the fourth part of water of the infusion of Roses, and let them stand in the Sunne fortie daies. When straine it and againe put to the iuyce of Roses, and let it stande in the Sunne.

It doeth strengthen the partes of the boole, it resolucth, and ceaseth dolor.

Oleum Rosatum Pauli.

Rec. Rosarum exemptis vnguibus, three ounces, Olei omphacini, sixe ounces.

Put these in a glasse and stop them well that they breath not out, and let them stand in the Sunne fortie daies. Other doe not set the glasse in the Sunne, but hang the glasse in a well nere to the water, for the space of fortie daies.

It both extinguish inflammations, it both corroborate, restrain, and cease fluxes, it keepeth backe the humours which floweth through the boole, &c.

Oleum Rosatum omphacinum.

Rec. Olei Ohuarum immaturarum loti, one pound, Rosarum rubrarum purgatarum, four ounces.

The Roses being brused and mixed with the Dyle, put them in a glasse, and doe as is afore sayd in the composition of the other oyles, and chaunge your roses three times.

The vertue of this Dyle is all one with that which is mentioned before.

Oleum



## Oleum Chamemelinae Pauli

Rec. Florum Chamemeli, deuptis folijs albis, liij. ounces, Olei oliuarum two pound and a halfe. Take the flowers must be cle in the shadowe 24 houres, then put them with the oyle into a glasse with a narrow mouth, being well stopp'd, and let it stand in the Sunne thre daies.

It is of right god effect in the passions of the ignes, and for the Collicke, and many other infirmities, so; it both repell and moderatlie digest.

Oleum Cydoniorum Melar. Succi Cydoniorum, ana. vi. ounces, Olei oliuarum immaturarum, iij. pound.

Fiat ex carne Cydoniorum prunatorum cum cortice. Succi Cydoniorum, ana. vi. ounces, Olei oliuarum immaturarum, iij. pound.

Put all in a glasse well stopp'd, and let it stand fittene daies in the sunne. Then while it by the space of foure houres on the fire in a double vessell. Then straine it and presse out the iuyce. Then put new into the Oyle, and let it in the Sunne, after boile it, and expresse it as afoze, and do so the third time, and reserve it to thy vse. It both refrigerate, and stayeth fluxes, and doeth also strengthen the bellie and nerves, being applied unto them, &c.

Oleum populeon Nicolai. Gummarum Populi arboris recentum, three pound. The budde of Pople must be bzused and macerated in Oyle and Wine, the space of seauen daies. Then boyle them in a double vessell untill the wine be consumed, then straine it and reserve it to thy vse. It helpeth paine in the head, in the ignes, and is good against the gout, and to heren belone and paine is, &c.

M. iij.

Oleum

**Oleum Nardinum compositum Mesue:**

Rec. Nardis Indice, foure ounces, Sampsuchii, id est, Maior-  
rang two ounces, Ligni Aloes, Enule, Folij indi, Calami ara-  
matici, Foliorum Iusti, Cypri, Schornanthi, Cardomomi, a-  
nyone of these, and put to it of Vni, Agur, ana q. Soli  
loti, vi. pound.

Let them be macerated twelue houres together. Then  
boyle them in a double vessel, and make an oyle according  
to arte.

This Oyle doth heate, attenuate, and digest, wherefore  
it is right good in all colde and windie infirmities of the  
braine, stomacke, liuer, splene, reines, bladder, and matrice.  
It doth also cause good colour of the bodie, &c.

**Oleum Sampsuchinum.**

Rec. Foliorum Sampsuchi, id est, Maiorance, m. iij. Ser-  
pellin, i. Foliorum Myrti, m. iij. Abrotini, Sisymbri seu-  
mente aquatica, ana, m. halfe, Caci, two ounces, Olei ompha-  
cini, quantum sufficit.

Cut and bruse the herbes, and put them in a glasse,  
and set this glasse in the sunne eight daies. Then straine  
it, which done, put other new parcellles, and boile it againe  
and straine it, and doe this the third time.

It helpeth lassitude and wearinesse, and is right comfo-  
table in passions of the braine and nerves. Wherefore the  
spine of the backe being anointed with it, it helpeth the  
Pallie and Crampe, and is good against the Ring of Scor-  
pions, &c.

**Oleum Hyperici magistrale.**

Rec. Olei veteris, foure pound, Nini albi petreus, one  
pound, Florum Hyperici, one pound.

Boyle the flowers and macerate them in the wine and  
oyle,

oyle, being put in a glasse well stopt two daies. Then boile them, straine them, and put in the oyle to them. This do thrice, then put to euery pinte of this of Terebinthina, vi. ounces, Olei absinthij, three vnces, Distamini, Gentianæ, Cardui benedicti, Tormentillæ, Carlinæ, Calami aromatici, ana, two dragmes, Lumbricorum in Vino pluries Lotorum, two ounces.

Bruse all and let them stand in the Sunne fortie daies, and stop the glasse well, and receiue it to the vse.

It hath the vertues with those going before, and is of more force in the same infirmities, &c.

### Oleum Castorei magistrale.

Rec. Castorei, Styraçis calamiz, Galbani, Euphorbij, Casia, Croci, Opopanacis, Carpobalsami, Spicz nardi indicæ, Costi, ana, two dragmes, Cyperi, Schœnanthi, Piperis longi, Piperis nigri, Sabinæ, Pyrethi, ana, two dragmes and a halfe, Olei foure pound, Vini, two pound.

Dissolue the Opoponar and Galbanum in some parte of the wine. Then bruse the other things, and put them to the Oyle and therest of the wine, and boile them untill the wine be consumed, then straine it and put the Gums and Wine in which they were dissolved to it, and boyle them together untill the Wine be consumed, and reserve it to the vse.

It is a singular remedie for all colde passions, especiallye of the ioyntes and neruous partes. It healeth the Palsie, Crampe, and rigours in Feauers, if you anoint the backe with it, &c.

### Oleum Costinum Mesur.

Rec. Costi, two ounces, Casia one ounce, Summitatum sampsuchi, viii. ounces. Vini quantum sufficit, Olei oliuarum three pound.

Bruse these and macerate them two daies, then boyle them in a double vessell untill the consumption of the wine &

reserue

reserue



## The second booke of

reference it to the use, &c. It openeth obstructions, helpeth the stomacke partes, muscles, tendons, and ligaments. Also the stomacke and liuer, and helpeth much to the increasing of good colour in the body, &c.

### Oleum Papaverinum.

Rec. Caputum papaveris, Foliorum papaveris, Florum papaveris, ana, partes equales, Olei quantum sufficit. Put these in a Glasse, and let them stand leaven vnder in the sunne, then straine them, and put new to the Dyle, this doe three times.

It taketh awaie hot distemperance, and paines and griefe springing thereof.

### Oleum Lumbicorum.

Rec. Lumbicorum terrestrium, halfe a pound, Probe siccantur in vino, deinde immittantur in olei rosati omphacini, ij. pound, Vini, two ounces.

Boile all in a double vessell vnto the consumption of the Oile, then straine them, and reserve it to the use.

It cureth the colde passions of the nerues, and is profitable for colour and paine of the loynes, &c.

### Oleum Balsami Petri de Ebeno.

Rec. Myrrhæ, Aloes, Spicæ nardi, Sanguinis draconis, Thuris, Mumiz, Opoponacis, ana, two dragmes, Calpobalsam, Bdellij, Hammoniaci, Sarcocolle, Croci, Mastiches, Gummi arabici, Styracis liquidæ, ana, two dragmes, Ladani, Castorei, ana, two dragmes and a halfe, Mastiches halfe a dragme, Terebintinæ ad pondus omnium.

Bruse those that are to be vnted, and mixe them together, and distill them in a Glasse of Limbeck according to arte.

It is of great force and strength against those infirmities

ulcers, which spring of colde causes etc.

**Oleum Balsami Brunswicensis.**

**Rec.** Ligni aloes, two vnces. Opopanacis, Resina de Pino, Bdellij, Galbani, Ammoniacki, Mastiches, Sarcocollæ, ana. iij. vnces. Gummi elemij, Olibani, Myrrhæ, Gummi cupressi, Olei Laurini, Olei Benedicti, Laudani ana. iij. 3. Carpobalsami, Xylobalsami, Opobalsami, ana. j. 3. Sanguinis draconis, halfe an vnce. Castori, Spice nardi, Cubube, Maceris, Cinnamon, Granorum paradisi, Corticis cieri, ana. j. dragme. Olei Terebinthinæ, omnium pondus.

Put all these together, and distill them by a Glasse limbecke, and reserve it to thy use.

This is the Baulme wherewith greene & fresh wounds are speedily cured and healed, and it hath merueilous vertues as shall appeare to him that putteth it in practise.

**Balsamum viride nostre inuentionis.**

**Rec.** Olei Rosarum, one pounce and a halfe. Put it in a panne & put thereto Rosemarine, Caphare, ana. iij. vnces.

Let them be brused before you put them in, then take, Malicom, one vnce and a halfe, Ligni vite, two vnces.

Being made in fine powder then boyle all these together the space of an hower, straine them and put to the straining.

Terebinthinæ, one pounce, Aqua vite. iij. times stilled, one pounce put into your aqua vite. Aloes Cicotrina, one vnce. Rubarbare, one vnce and a halfe.

Let these be made in fine powder and let it stande two dayes infused, then straine it, & put the Aqua vite so strained to your oyle and Turpentine aforesaide, then let it on the fire and let it boile a little, till the most parte of the Aqua vite be consumed, then take the powder of Mastiches, Olibani, ana. iij. vnces. Viridis eris, Lumbricorum puluerisat, ana. ij. vnces.

Mashe your wozmes first in white wine, then boyle all these

these things together in little place, then take it from the fire and Curre it till that it be colde, and so used according to arte.

Balsamum artificia. Lullij.

Rec. Terebinthine, one pounce, and a halfe. Galban, two vnces. Aloes dicotome, Mastiches, Caryophyl, Galanga, Cinnamoni, Nucum muscat, Cubebanum, ana, one vnce. Gummi hedere, halfe an vnce.

When all these are well beaten, mixe them and distill them in a Limbecke of glasse with a slowe fire first, & receive the first by it selfe severally: then increasing the fire, a waier somewhat reddishe will come, and after increasing it more, an oyle of redde colour, and so doe till nothing run any more, changing the receiver thise. This oyle hath all the vertues of true baulme: for it sinketh in the water, and coureth milke by and by: for if one droppe of it be put into a pint of milke, it shall forthwith become coured. The first liquoz is called water of baulme, the second oyle of baulme, the third baulme artificiall. The first is profitable against the running of the Gares, if two or three dropes morning and evening be put into them, also dropt into the Eyes, it amendeth the blearing, and consumeth the teares, it both marvellously restraine superfluous humours in any parte of the body. It taketh away the tooth ake, if they be washt therewith, and kill the wormes if there be in them. The third liquoz will suffer no venim, for it is an bitter enemie and destruction to Spiders and Serpents, two or three dropes being let drop in ante venomous biting, doe make it whole straight. If thou drawe a circle with this liquoz, and shut a venomous beast therein, it shall die rather than goe out of it. We be short, it doeth all the same things that Ariack doeth, but more effectually all things. Being poured or put upon any Apostume, within nine daies, it healeth them, and likewise a Fistula, be it never so ill, and also Noli me tangere, all diseases bredde of heame and colde humours, it healeth them, if a linnen cloth dipped in it be laide vpon the place where the grease is, it putteth away utterly the palse, & all trembling of members,



here, it strengtheneth meruailouslie the sinewes, it is hotter than the first and second, if a man put a drop of it in his hand, it pearceth without great griefe. To conclude, it doth many other things, and all diseases risen of a cold cause, it healeth them, if they be it right according to art. All this is Lullius saying.

### Aliud Balsamum Dorantij.

Rec. Ammoniack, Opoponack, Resine pine, Bdellij, Mastiches, Galbani, Gummi elemis, Olibani, Myrrhe, Sarcocollæ, ana, halfe an ounce, Xylobalsami, one ounce, Olei benedictæ, Laurini, ana, j. 3. & 5. Balsami Gul. Placentini, halfe an ounce, Sanguinis draconis, Laudani puri, ana, two dragmes, Spicz nardi, Castorij, Galangæ, Cubebarum, Cinamomi, Cardamomi, Granorum paradisi, Corticis citri, ana, i. dragme, Olei Terebinthinæ, ad pondus omnium.

Let all those be made in powder that are to be made in powder, and the gums that cannot be made in powder, let them be cut in small peeces, and put into a Glasse vessel with the oyle & balme aforesayd, & let them lie in steape in dayes, then distill them in Balneo Mariæ, the space of foure houres, then let them stand seauen dayes more, and distill them againe, as is aforesayde, then straine them, so haue you a precious Balme, which you may keepe to your vse, for the curing of woundes, both in the limber and instrumentall partes.

### Balsamum ex intestinis terræ nostræ inuentionis.

Rec. Lumbricorum halfe a pound, put them in white wine to purge them one daie, then slit them and make them cleane from all earthie matter, then stampe them finelie, and put to them one pinte of good Maluisey, and one quart of Oyle of sumper, boyle them all together till the wine be consumed, then straine it, and adde to the straining.

Rec. Micholij, vi. vnces, Florum chamomeli, Foeniculi, Opopana-

Opopanax, Ammoniac, ana, .j. vnccs, Gummi Arabici, four vnccs. Desolved in blinger according to art, Olibani, Mastiches, ana, .j. vnccs and a halfe, Myrrh, Sang, draconis, ana, .j. vncc, Olei Hipericie, Terebinthine, ana, .vi. vnccs, Boraci, .iiij. vnccs, Aqua vite fortissime, .iiij. vnccs and a halfe, Croci, .j. dragmes, Terebinthina, .xij. vnccs.

Boyle all these together in a bodie of glasse, in Balneo marie, vnto the wine and Aqua vite be consumed, then let it stand twentie dayes infused, & after that boyle it againe two halwers and so straine it and keepe it to your vse.

This Baulme is most precious in woundes of nerves & iunctures of all other.

**Balsamum ex Croco nostre inuentionis.**

Rec. Foliorum consolide maioris, Consolide minoris, Marubie, Cetaurij, Hipericie, ana, M. .j. Florum Rosinarii, Chamamille, ana, M. .c.

Let your flowers and herbes be dyle and grole beaten, & put to them one pinte of Oileum Lumbicorum, and one pinte of Spalmeley. When let them boyle all together softly, the space of two halwers in a pot vntill close stopp'd, then straine it and add to the straining Mastiches, Myrrh, ana one vncc, Olibani, Croci, ana, one vncc and a halfe, Sang, draconis, Gummi dragagant, Sarcocolla, ana, halfe a vncc, Laudani, Cassia, Bingeni, ana, .j. dragmes.

Spake all these in powder, then adde to them Oileum Terebinthine, .iiij. vnccs, Spice nardi, one vncc, Terebinthine lota, .vi. vnccs.

Boyle all these in Balneo marie, according to arte. This Baulme is most precious in woundes of the breast that perforth thrust into the bodie, as I haue many times proued my selfe.

**Emplastrum de meliloto**

MESVAE.

Rec. Meliloti, .vi. vnccs, Florum chamomeli, Foenigreci, Baccarum

Baccarum Iamni, Radicum althea, Coltharum absinthij, ana, ij. dragmes. Seminis absinthij, Cardamomi, Iridis, Cyperi, Spicæ nardi, Casie, Seminis ammi, ana, one dragme and a halfe. Foliorum perfolij, ij. dragmes. Hammoniack, x. dragmes. Styrcis, Bdellij v. dragmes. Terebinthina, one vnce. and a halfe. Ficus pinguis numero, xij. Sepi hircini, Resinæ Picis, ana, ij. vnces and a halfe. Cera, vj. vnces. Olei sampluteini, Olei nardi, ana one pound, Confice, sic Fit decoctio, Meliloti, Fornigraci, Chamemelij, ana, q. s.

Boile these into the consumption of the halfe, then straine them and put thereto your percells finelle made in powder, and boile them againe adding the oyles Turpentine and Cammes dissolved in vinegar. When put to the rotes and sigges being well brused and well boyled together. And mixe all these together and make an emplaster according to arte. It both mollifie all hardnes of the Limbes, Liver, spleene, and other intralles. It both also treats vehement colour and paine. And greatly allevieth the of Hypochondria, &c.

**Dia Melliton Andromachi ex Galeno.**

Rec. Nardi gallica, Cyperi, Iridis, Myrrhæ, ana, viij. dragmes. Croci, iij. dragmes. Meliloti, xxv. dragmes. Hammoniack, Terebinthina, ana, one dragme. Cere, one hundred dragmes. Olei Cyprini, sixe vnces. Aceti, q. s. Fiat emplastrum.

This emplaster is of like vertue with that which is next before described &c.

**Emplastrum ex fermento Democriti ex Mesue.**

Rec. Mellis, Fermenti, ana, one pounce, Visci quercini, foure vnces, Hammoniack in aqua fornigraci, ant. lacte moriborij, three vnces. Fecis olei veteris q. s. Fiat emplastrum.

This emplaster is of great vertue in braining out thornes and thinges in any place. Also in taking out the bones broken of Cranium fracture, yea although they be fixed in Dura and Pia mater.

Aliud



The second Booke, of

Rec. Fomentis Mellis, Oli. Communi. Lactis muliebri.  
 Virelli odorum, ana one dragma. Fiat Emplastrum.  
 It both digest and maturate inflammation, and brash  
 keth apostumes. And if to this receipt you ad Boelium, a  
 ana hordet, it draweth out the paine, and is so much the  
 better if you put to it of Galbanum dissolved by vinegar.  
 Dia Chalciteos Galeni, palmeum vnguen-  
 tum dictum.

Rec. Axungie porci veteris a membranis per Ligationem  
 & Colationem purgate two pound. Oli veteris, Lithargi-  
 ri triti, ana three pound. Chalcitidis vñe fourc vnces.

Boyle all on the fire and sturre them with a stick new  
 taken off the Date tree, (you may in the place hereof vse a  
 sprig of the Oke) and when as it is well nere boyled, adde  
 thereto of the tender croppes of the Date tree new gather-  
 red and cut small, fourc ounces, (you may in the place here-  
 of vse the young buds & twigs of the Oke) boyle all these  
 vnto the thicknesse of a Cerote.

This is right good against greene wounds, pestilentiall  
 tumours, apostumes, burnings, ruptures, contusions, and  
 ecchymomata &c.

Diachylon Melis prime descriptionis.

Rec. Mucaginis Seminis Foenogreci, Mucaginis Seminis  
 lini, Mucaginis Radicum althez, ana i. vñce. Lithargyn, one  
 vñce, and a halfe. Oli antiqui clari, three vñces.

The Lytharge must be made in most fine powder, and  
 tempered with the Oyle. Then boyle them on a soft fier,  
 styring them alwayes with a stye, vntil they be wel boy-  
 led, and incorporate together. Then put to your muselages  
 and boyle them againe vnto a sufficient thicknesse.

It is good against scyrrhous of the Liver, Spleene, Lute-  
 macke, and other parts, it mollifieth all hardnesse.

Alij addunt pulueris iridis, Mucaginis Meliloti, Ana, one  
 ounce.

Then



• **infects** by the **ovary** and **all** **hermaphrodite** and **female** **ovules**, **tubercles**, **fillicles**, **myoflagellate** **ovules**, and **hermaphrodite** **of** **the** **papae**.

ALLI OLEI VETERIS LOCO ACCIPIMUS.

Emplastrum ad vulnera recentia, Called in the Enchi-  
ridion, the greene wounde plaster.  
Rec. Resinæ, Pino, Cere. virginæ, ana. ij. pounce. Bals-  
am. Sassafras. ana. s. ij. vnces. Colophonij. ana. vnce. Sarcoc-  
olle, iij. vnce. Terebinthine, halfe a pounce. Mastiche. Oli-  
bani, ana. iij. vnces. Dragacanthi. Gumi arabici, Galbani, Am-  
moniaci, ana. one vnce, and a halfe. Storacis calamitæ, ij. vnces.  
Storacis liquide, foure vnces. Succorum Pyrolæ vtriusque Sa-  
racenici, Diabensic, Meronici, Soliseflequi, Consolide vno-  
ris, Anthemis, Plantaginis vtriusque, Betonice, Agimonic,  
Matrisilue, Cencelii, Saluie, Verbene, Pilosille, ana, three  
pounce.

Boyle the iufes of thefe herbes, with the Oyle, Rofine,  
Colophonium, and harfen fuet on a fofte fier, with coles  
vntill two partes bee consumed: Then put to it Turpen-  
tine, and the gummes being diffolued in Vinegar of Rofes  
and let them boile a fpace: Then put to it Scirax liquida,  
and Calamita, and if you will haue it fweete fmelling you  
fhall adde Moschi, ij. fcruples. Straine thefe through a cloth  
and let it ftand a night, and the next day make it in rolles  
with oyle of Rofes. But if you will haue the plafter greener,  
put to it Succifolatri, Sambuci, Chelidoni, ana. three  
pounds. And boyle your Plafter againe therewith, but not  
long.

This is an excellent Plaster in all greene and frethe  
woundes. For it doeth mundifie incarnate and consolidate  
without maner of tentes, it is of merueilous vertues, and  
therefoze had in these dayes in more frequent vse. There  
be diuers compositions: but in my opinion this is the best.

**Emplastrum Judaicum, called the Jewes Plaster,**  
 Rec. Gergale, four pounde. Resolde Pino, Resine To-  
 rebinthine, ana, two pounde. Olei rofati, one pottle half.  
 Stiches,



**A**licha, Olibani, Myrrha, ana. s. uncies. Rosarum Reticin,  
 lxx. uncies. Vin. Rubei, lxx. pound. Succorum piroxæ, Diapensie,  
 Matrisiluræ, Sarcocollæ, Herbarum tuncici, Solisæsq. Bethonice,  
 Consolidæ minoris, Fumarie, Plantaginis, triusq. Valeri-  
 anæ, ana. q. s. of each till it is dissolved in the spirit.

Use the hearbes, and take of the iuyces, and put to the  
wine, and boile them on the fire a good space. When straine  
them, and put to it so strained, Mace, Turpentine, Ro-  
sen, and Oyle. When seeth the Roses, after straine them,  
and put them in a Rettle, and seeth them five or six houres,  
then take it from the fire, and let it be colde. The next day  
following melt it againe, and adde to it Balsike, Fran-  
kincense, and Myre, and suffer it a little to boile together,  
after let it coole, and make it in rolle.

This emplaster hath the like vertues that the other going before. For it doth mendifie, incarnate, & consolidate all greene and fresh woundes, and healeth them without Fences.

**Emplastrum attractivum Brun-**  
**wicensis.**

Rec. Apostolicon Nicolai, two ounces, Magnetis orientalis, halfe an ounce, Pinguedinis leporine, Olei canibus, ana, 3. ℞  
 Melt the oile and Beares greafe together, and then put to it the parcells abovesaid, and make therof an emplaster according to arte.

This Emplaister is much praised in drawing out anie  
yon fired in woundes, as arrowe heades, maile, shotte, or  
such lyke.

**Emplastrum Gratia Dei vocatum.**

Rec. Terebinthina, halfe a pound, Refine, one pound, Ce-  
re alba, foure ounces, Maffiches, five ounces, Betonica, Verba-  
ne, Pimpenelle, ana, m. j.  
Stamp your hearbes in a mortar, and put them into a  
quart of white wine, and boile it well till the third part be  
consumed,  
R.

## The second booke of

consumed, and that it haue taken the strength of the hearbe,  
then put in your Ware, Rosen, and Pasthe, into the iuyce  
and wine, and let them boile on the fire vntill the licour be  
consumed, euer stirring, and then take it off the fire, and put  
in the Turpentine, and boile it till it come to the forme of a  
plaister, euer moze stirring it well.

This plaister is good for wounds that be cut or brused, &  
for broken bones, and soyns that hath bene out, and for ach  
and paine that cometh of colde.

### Emplastrum de Minio.

Rec. Olei rosati, one pound and a halfe. Vnguenti Populei,  
Olei Myrtillorum, ana, foure ounces. Pingued. Caponis, two  
ounces. Sapi vitulini, Vaccini, ana, halfe a pound. Axungie,  
seuen ounces. Lithargyri auri, Argenti, ana, three ounces and a  
halfe, Minij, Ceruse, Terebinthine, ana, foure ounces. Cete,  
that is sufficient.

Let all these be boiled together till it be blacke, & make  
thereof a plaister according to art. This plaister is good for  
olde sores, and is the experiment of Ioannes de Vigo.

### Emplastrum Triapharmacum.

Rec. Olei communis, foure pound. Lythargyri auri, two  
pound. Aceti fortissi, halfe a pound.

Make hereof a plaister according to arte, Emplastrum  
Triapharmacum is good to make flesh grow in wounds, and  
to consolidate and heale them.

### The making of the white Muscilage plaister, called Diachilon paruum.

Take first your Marsh malloie rotes and wash them,  
and picke them verie cleane, then slice them, and take forth  
the pith, and cast it a waie, and cut the other in small peeces,  
then stamp them in a mofet, and put two pound of that  
same you haue stamped into a new earthen pot, with foure  
ounces

minuts of Limesbe, and foure ounces of Hemegrethe scabbe  
in grose powder, then put vnto them one quart of white  
wine, and one quart of water, and sturre it well together, &  
let the water be boiling hot. When let it stand foure or fve  
daies, til it come to perfect muscilage, enerie day stirring it,  
then straine it, and so you haue your Muscilage. *modi in*  
When take Litarge of Lead in fine powder, searfed tho  
rough a fine cloth, five pound, common oyle foure quarters.  
When boile the oile and Litarge vppon a soft fire till it fall  
to a plaister, & then take a pint of your muscilage, & put it in  
by little, & little least it run ouer the pan, and alwaies stir  
it, so doing til you haue put in one quart of your muscilage,  
and so sturre it a little space after till it beginne to waxe  
colde, then put in the rest of your muscilage, when you per  
ceiue it will not runne ouer the pan, and so continuallie la  
bour and worke it till it be verie white, then make it by in  
rolls, and keepe it to your vse.

*Emplastrum muscilagineum ad Resolucendum*

*Humores in tibijs*  
This plaister was deuised for king Henrie the eight, to  
amend the swelling in his legges.

Take the rootes of March mallowes, wash and picke them  
cleane, then slit them, and take out the inner pith, & cast  
it away, and take the opposaite saire white part, & cut them in  
small pierces, and boyle them in a moyter, and thereof take  
three pound and put them in a new earthen pot, & adde there  
to of wine of redde and fetterlock, ana. two ounces a little bran  
ned in a moyter, then put thereto Palmsey and white wine  
vini, a pint, and sturre all together, and let them stand  
two or thre daies, then set them ouer a soft fire, & sturre  
it well till it waxe thicke, and sinie, then take it off, and  
straine it through a new canvas cloth, and thus haue you  
your Muscilage redie, & the to make your plaster. Take fine  
oile of roses, a quart, & wash it well with white wine & rose  
water. When take the oile cleane from the water and wine,



and set it ouer the fire in a brasse pan, alwaies stirring it, and put thereto the powder of Lithargyri auri, Lithargyri argenti, ana, eight ounces. Ceruse, sixe ounces, Corallo rub. two ounces, Boli arimiaci, Sanguis draconis, ana, one ounce.

And in ants wise make them in fine powder searfed, then put them into the oile ouer the fire, alwaies stirring, and let not the fire be too bigge for burning of the stufte, and when it beginneth to waie thicke; then put in of the sayde mustilage .x. ounces, by little and little at once, or else it will boile ouer the pan, and when it is boyled enough, ye shall perceiue by the hardnesse or softnesse thereof, if thou drop a little of it on a dily bottome or cold stone, then take it from the fire, and when it is niere colde, make it in rols, and lay them in parchment, and keape them to your vse.

Emplastrum pro Chameliontasi mostre inuentionis.

Rec. Axungie, two pound. Aquarum rosarum, Plantaginis, foure ounces.

Wash it well untill the waters be consumed in the said grease, then let it stand the space of foure seene daies, then put it in a pan ouer the fire, and adde to it Oleum Rosarum, one pound. Minij, two pound, Aceti optimi, one pinte.

Let the barks of Elme remaine in the vineger foure daies infused, make hereof a plaister according to art. This is a good plaister for sores or bites, and for sore legges, and many other things, for it mollifieth and healeth gentlie, and taketh away paine. This plaister I did vse much in the scabs of Chameliontasi, after they were annuised with Mercurie precipitate. And also in swelling of roynes, and in the goot, and with this plaister I did heale many after the sores was well purged, and if thou doubtest howe to heale an olde sore, thou must put in a little Copraisse in powder into the Vineger, and so boyle it according to arte.

Emplastrum Ceruse.

Rec. Olei rosi, two pound, Axungie, lye in aqua rosoma & viho, one pound.

Ceruse







giant, drawing Bolianus, and a new water, and all these  
 made in beere, first putter them take oyle of Roses a pint,  
 and set it over a soft fire, putting thereto Cere albus halfe a  
 pound. Sapi cornilla, and other such may be used, may be used  
 when they be reduced, and thereto all the powders  
 and stirre them well, and let them boile a little while, then  
 take it away, and put thereto a fine powder, Masticke, O-  
 libani, and other such. And stirre it, and when it is almost  
 colde, put thereto Terebinthine, two ounces, Camphore, two  
 dragmes. Make in fine powder, and well mingled, and make  
 it by in rolls, according to art, and keep it in leather, and  
 to use it. *Emplastrum deficcatorium, D. Butirum de oleo de*  
*Emplastrum deficcatorium, D. Butirum de oleo de*

& medici Regij.

Rec. Olei rosati, eight ounces. Cere, Mindij, ana, two  
 ounces. Lythargiri auri, Sanguinis draconis, Boli armeni, ana,  
 one ounce, Camphore, two dragmes.

Make all these spinnalls in fine powder, & mixe it with  
 the Oyle, and set it on a soft fire, alwaies stirring it, and let  
 them boile till they be plaister like, & so make it by in rolls.  
 And if you add unto this plaister in the boiling therof iiii.  
 ounces of vinegar of roses, it will be much better to dye, &  
 defend the members from accidents. This plaister was  
 well proved by King Henrie the eighth for his legges. *Emplastrum Guli, Butirum de oleo de*

Rec. Lithargiri pulveris, i pound. Olei rosati, one pint.  
 Cere albus, one ounce. Myrica, Olibani, ana, one ounce. Vi-  
 ni albi, Musci, ana, halfe a pound. Alecti albi, a quarter of a  
 pound. Solani, Plantaginis, ana, iij. ounces.

Put the hearbes into a moxer with the vinegar, and  
 stampe them together, then wring out the iyce, and put  
 into the Vineger, and Wine above sayde. And thus you  
 must make your plaister. Well pound Oyle and Wine  
 together in a faire Panne, and set it to dye. Then by lit-  
 tle and little put in your Litharge, ever stirring it.

R. lili.

Atter.



It cureth both vey fistules which haue not talles indurated, and cureth them. And both coagulate grans and bloody wounds and such like, &c.

### Oculorum Galeni.

**Rec.** Lithargyri argenti, one pound. Olei clari Vini albi optimi, ana two pound. Coque et confice vt superiora.

It cureth eyecate and veyes, therefore it is good against fluxes and rheumaticke passions, and it healeth greene wounds.

**Dia piperis Galeni.**

**Ret.** Lithargyri argenti, Ceruse, ana one pound. Olei communis, two pound. Cere vj. vnces. Terebinthine, three vnces. Thuris, one vnce and a halfe. Aluminis, vj. dragmes. Piperis, iij. dragmes. Fiat in hunc modum.

The Lyptharge being made in fine powder, is to be boyled with oyle, in the same and so long it is to be boyled untill it come to the substance of an Emplaster and will not cleane to your hands. Then put to it the Turpentine and ware. These being molten, you shall ad your Pepper, Frankensence, and Aloie, made in fine powder. Last of all, put to your Ceruse also finely powdered. And alwayes in the boiling stirre them, and boyle them so long untill they come to the thickness of a cerote.

It healeth the vlters and sores in olde men, and those that haue lost bodies. And further, cureth all vlters which will not without difficultie come to a cicatrice.

**Ceratum e Cerusa.**

**Rec.** Ceruse, one pound and a halfe. Olei Rosati, ij. pound. Cera candida, iij. vnces.

The war being molten, put to the Ceruse made in fine powder and boyle it so long untill it cometh to blacke colour.

It cureth burnings, skaldings, erysipelas scabbes, and all hot vlters, &c.

**Ceratum e Betonica, Capensis.**

**Rec.** Terebinthine, Rectified pini, Cere flaua, Ana iij. vnces.



The second booke of

**Betonicæ pulueratæ**, one ynce, **Mastiches**, **Thuris**, ana, halfe an ynce, **Mumie**, foure dragmes, **Misce**, **Fiat**, **malagma**, **capitis**, **vulnera** **utile**.

It is right profitable in paines of the head, &c.

**Ceratum Capitale, Carpentis.**

**Rec.** **Terebinthine** in **vin**o **maluatico**, **sepius** **lot**g, **Resine** **pini**, **Cere** **albe**, ana, three ounces, **Mumie**,  $\frac{3}{4}$  & halfe.

The **Turpentine**, **Rosen**, and **more** being **molt**ed, put to the **Mumie** made in **fine** **pouder**. Boile them on the **fire**, & **stirre** them **continuallie**. When put these in a cleane **vessell** in which is **rose** **vineger** made of **Walnuttey**, **foure** **pound**. Let all these **macerate** **xxiij** **houres**, then **expresse** & **wring** out the **vineger** with your **handes**, and **heape** in a **vessell** of **glasse** to the **use**, &c.

**Ceratum e Syrace, Magistral.**

**Rec.** **Syracia** **liquida**, **foure** **ounces**, **Cere** **flaua**, **two** **ounces**, **Thuris**, **Myrris**, ana, one ounce, **Fiat** **ceratum** **secundum** **artem**. It doth all **wage** and **crack** **hard** **tumours** of **the** **neck** and **countes**, and **other** **parts**.

**Ceratum Gratia Dei.**

**Rec.** **Gambani**, **Opopanacis**, **Acruginis**, **Thuris**, **Aristolochie** **longe**, **Mastiches**, **Myrris**, ana, one ounce, **Hammoniaci**, **ounce**  $\frac{1}{2}$ , **dragme**,  $\frac{1}{2}$ , **Cere**, **eight** **ounces**, **Lithargiri**, **Olei** **communis**, ana, **xviii** **ounces**, **Bdelij**, **two** **ounces**, **Lapidiscalaminiis**, **Lapidis** **Hematitis**, ana, one ounce, **Olei** **absinthij**, **foure** **ounces**, **Terebinthinæ**, **sixe** **ounces**, **Fiat** **Ceratum**.

It doth **mollifie**, **mundifie**, & **conglutinate**, & therefore is right excellent in **Apostumes**, **tumors**, and such like. It is profitable in **filthie** **bleers**, & doth **conglutinate** **wounds**, &c.

**Dia Cadma Galeni.**

**Rec.** **Cadmie** **preparatæ**, **Chalcitidis** **vstis**, ana, **xvi** **dragmes**, **Cere**, **boox**,  $\frac{3}{4}$ , **Colophonie**, **lxiii**,  $\frac{3}{4}$ , **Olei** **myrtini**,  $\frac{1}{2}$  **pound**.

It is right excellent in **bleers** which will not **enfilie** come to a **ciatrice**, for it doth **ciatrice** all **bleers**, &c.

**Ceratum de Salice.**

**Rec.** **Misy**, **Aluminis** **roti**, **Chalcitides**, **Melantherij**, **Aeruginis**, **Aluminis** **scissilis**, **Gallarum** **accerbarum**, ana, **sc** ounces.

**Cem.**

Ceruse, Cere, Resina friste, Picis brutie, Bituminis, Olæ  
omphacini, Follorum salicis tenerorum, ana, two pound.

Boile the leanes in strong vinegar, then beat them, and  
melt them in fine powder. Then melt that is to be molten,  
and in the cooling add your other parcels made in fine  
powder, and make a cerote according to art, &c.  
It both heale blcers malignant, and those that will hardly  
be cured. Also Theriaca, & many other effects, as fistules  
and other.

Barbarum paruum Galeni.

Rec. Picis nigre, Cere, Resine pini, Picis Grece, Bitumi-  
nis, ana, one pound. Lithargyri, ten dragmes, Ceruse, Aerugi-  
nis, ana, five dragmes. Opoponacis, iij. dragmes. Olei, ix. &c.

Let those things that are to be beaten, be put in a mortar  
with strong vinegar. The other must be molten on the fire,  
and all being mixed together, boile them so long, untill they  
cleave to the fingers. But if thou wilt have it apter to cease  
dolour and paine, adde to it of Succo hyoscyami, Opij, ana,  
halfe a dragme.

It is good to be used in greene and fresh wounds, and for  
the biting of mad dogs. Also for inflammations of the ioynts,  
and the goot, &c.

Barbarum magnum Galeni.

Rec. Picis, viii. pound. Cere, vii. pound, viii. ounces. Resina  
pini, v. pound, four ounces. Bituminis, foure pound. Olei, one  
pound, vi. ounces. Lithargyri, Ceruse, Aeruginis, ana, iij. oun-  
cis, Thuris, vi. ounces. Aluminis liquidi, i. ounce & a halfe. A-  
luminis scissilis, foure ounce. Opoponacis, Squammæ eris, Gal-  
bani, ana, xij. dragmes, Aloes, Opij, Myrthe, ana, foure dragmes.  
Succi mandragoræ, vi. dragmes. Terebinthine, ix. pound. Ace-  
tici, x. pound.

Take of these a cerote in such sort as is mentioned in the  
description going before, &c.

It is of the like vertues with the other going before, but  
that, where the other is used in small wounds, this is ap-  
plied to great wounds, &c.

Rec. Cere, c. dragmes. Terebinthine, cc. &c. Squammæ,

Acingi-

Aeruginis, Aristolochie, Thapsi, Sals, hamoniaci, Ana. viij  
ana. v. iij dragmes. Adumini. viij, v. dragmes. Myrtis, Aloes,  
Galbani, ana. x. dragmes. Olei veteris, x. dragmes. oil of  
Boyle them in the fire, your hand being wet with  
vineger, make of these rolles according as is written, and  
after put them in the ulcer ten dayes. Then take them out  
and rubbe them to the blood, and so on. Also good for  
all sorts of sores for the head. Also good for all  
bellious vlcers, and those that be bloudie. &c.

Rec. Ceratum vnde Machedonis ex Galeno. I. 2. 7  
Rec. Olei Rosati, omphacini, v. vices. Aristolochie, Gal-  
bani, Opoponacis, Hammoniaci, Aeruginis, Myrtis, Indis,  
Ana. one vnce. Terchinchina. x. vices. Sca. halfes. Cera. lan-  
tandem. Fiat ceratum.

It serueth for all greene wounds, it putteth away the  
flammatiō, and is used in vlcers of the eye and eare.  
It doth engender flesh on the bones that are bare, and doth  
out flesh, and doth conglutinate speedely. &c.

Rec. Dia dictamini Galeni.

Rec. Olei veteris, two pound and a halfe. Lithargy, one  
pound and a halfe. Aeruginis, one vnce. Squammæ aris, sixe  
dragmes. Colophonie, v. vices, dragmes. Pollinis thuris, one  
vnce and a halfe. Hammoniaci, two vices. Aeris vsti, j. vices,  
Diphrygis, Gentiane, Ana. v. vices. Propoleos, Aloes, Ana. j.  
vnce, Galbadi, one vnce and a halfe. Aristolochie rot. Dicta-  
mini. cretens. Ana. j. vnce, j. dragmes. Cera. xiv. dragmes. Co-  
fice in hunc modum.

Boyle your Litharge and oyle so long together untill  
that they are well boyled. Then put to your Ceru, and  
Squammæ aris, let them a little boyle. Then take them  
from the fier, and adde to them Rosine and Anthioniacum  
dissolued in Vineger, then put to Cloare and es Vitam.  
Then boyle them againe untill it cleaue not to the hand.

It is good in greene wounds, pūdures of the pēuer,  
olde vlcers, and those that will hardly cicatrize, also for  
postumes, felons, and scirrhus.



It draweth out things bred, as scrotes heads, barres, thornes, &c. and is of great force against all venemous biting and stinging, &c.

**Ceratum Oxycroceum Nicolai.**

Rec. Croci, Picis nigre, Picis grece, Cere, ana. iij. vnces. Terebinthine, Galbani, Hammoniati, Myrthe, Thuris, Mastiches, ana one vnce iij. dragmes.

The Galbanum and Hammoniati dissolved in Vineger, must be boyled until the Vineger be consumed. Then add the Pitch, Myrre, Terebinthine, all molten, after the Mastike, Frankensence, and Myrthe, made in fine powder. Boyle these until they come to a convenient thicknesse, then put in colde water, and depect it out againe. After with oyle of Bayes your handes being annointed, boyle this Cerote, and extend it out. Last of all, your salffron being made in fine powder, mixt them together, and make a Cerote as arte requireth.

It is used in fractured bones, and in the parts of the boeie, where as dolour and paineth.

It doth mollifie and make soft all hardnesse, and putteth it away quite, &c.

**Ceratum ex pelle arietina Arnoldi.**

Rec. Lithargyri, Lapid. Scleritis, Sanguinis Asaculij, Boharment, Opij, Mastiches, Hammoniati, Mumia, Galbani, Thuris, Colij, Lumbicorum, ana. halfe a dragme. Picis nigre, Picis grece, Cere albe, Cere rubre, ana one dragme. Radicum maioris, consolide, anagallis, Ana. iij. dragmes. Rosarum rubrarum, Myrrha, Aloes, ana. xviii. graines. Succ. hypocistidis, Gallarum imgiaturarum, Balastorum, Aristolochia rot. ana. vi. dragmes. Visci querubini, Terebinthine, ana. two dragmes. Sanguinis hominis rufi, iij. vnces. Fit autem in hunc modum.

Boyle the Lithargyri (Kune whole, with the haire and wolle on it in water, until it be brought into the substance of Glasse, which thou shalt straine. Take of the strained

## The second Booke of

one pound put in a new vessell, in which the Spittle is reserved, then put in the Linnethes, after the Gumme Turpentine, and Mastike, these being molten, put to the Gumme dissolved in vineger, and boile them to the thickness of a Cerote. Last of all adde the pouders, and mixe them together, and make them in rolls, &c.

It is of great force & vertus in ruptures, and hath often bene tried, &c.

**Ceratum D. Gul. Buttes Medici, ad vlcera antiqua & Phagedenica.**  
**Rec.** Olei rosati, Ceræ albæ, ana, one pound. Céruse, one pound and a halfe.

Set the oyle and ware together on a soft fire, and relient the ware with the oyle, then put in the Lead in fine powder, stirring it well untill it ware blacke. Then take it from the fire, and dip theretu peeces of fine linnen cloth, and thre is your searecloth.

**Ceratum D. Gul. Buttes Medici, ad iustoriarum dolores.**

**Rec.** Olei rosati, foure ounces. Aceti, two ounces. Lihargyri, Cerusa, Ceræ albæ, ana, one ounce. Sorie ferri preparata, fixe dragmen.

Set the oyle over the fire, and put thereto the vineger, & boile the on a soft fire till the vineger be trans consumed, then put in all the foresayd thinges finely powdered & seared, stir stirring it till it be plaister like, then dip in your cloutes, and when they be colde stripe them with a flake stone, and make them smooth, and vse them.

**Ceratum viride Iamarici.**

**Rec.** Olei rosati, halfe a pound. Sepi bubulini, one pound. Celidoni, allaway, otherwise called forrell de boies, yel panus conkelle, Lybistici, Thynni, Saluiz, ana, three ounces. Ceræ, Terbinthina, ana, two ounces. Virides eris, Aloes, ana, one ounce. Mastiches, Ohbani, ana, halfe an ounce.

Stamp all your hearbes with your oyle and tallowe, &

let them stand by the space of eight or nine daies, then boile them till you haue taken the strength of the hearbs, and put thereto first your ware, & let it boile till the ware be molten, then take it from the fire, and adde therunto all the rest of your things in verie fine powder, and last of all, when it is almost colde, put in your coales, continuallie stirring til it be colde. This ointment was made by the noble Chirurgion Iamarius, and is of most excellent operation.

## Trochisce and Pouders.

**Trochisci Andronij ex Andromacho.**

Rec. Florum mali punici, ten dragmes. Gallæ omphacitis, viij. dragmes. Myrrhæ, Aristolochiæ, ana, foure dragmes. Calcanthi, Aluminis scissilis, Myfi, ana, two dragmes. Formetur trochiscus in Sepæ, q. s. modico aqua (communi) out) sh

It is good in græne wounds, it healeth fistules, corrupted bones, and taketh awaie all superfluous fleshy, and is approved in eating vlcers called Phagedenica.

**Trochisci Polyde ex Andromacho.**

Rec. Florum mali punici, ten dragmes. Aluminis scissilis, three dragmes. Thuris, Myrrhæ, ana, foure dragmes. Calcanthi, two dragmes. Fellis taurini, fixe dragmes. Aloes, viij. gr. Formitur pastilli cum vini austeri, q. s.

It hath the like vertues and properties with the Trochisce befoze described.

**Trochisci Mesue.**

Rec. Aluminis scissilis, Aloes, Myrrhæ, Calcanthi, ana, fixe dragmes. Croci, Crocomagmatis. ana, iij. dragmes. Florum maluorum granatorum domesticorum, foure dragmes. Formentur pastilli cum vini odorati et mellis, ana, q. s. (sda) qd

This Trochisce hath many vertues, and serueth diuerse vles in Chirurgerie, it both relaxe and maturate, &c.

Trochisci



alio in 12. hinc anni in 10. hinc in 8. hinc in 6. hinc in 4. hinc in 2. hinc in 1. hinc in 1/2. hinc in 1/4. hinc in 1/8. hinc in 1/16. hinc in 1/32. hinc in 1/64. hinc in 1/128. hinc in 1/256. hinc in 1/512. hinc in 1/1024. hinc in 1/2048. hinc in 1/4096. hinc in 1/8192. hinc in 1/16384. hinc in 1/32768. hinc in 1/65536. hinc in 1/131072. hinc in 1/262144. hinc in 1/524288. hinc in 1/1048576. hinc in 1/2097152. hinc in 1/4194304. hinc in 1/8388608. hinc in 1/16777216. hinc in 1/33554432. hinc in 1/67108864. hinc in 1/134217728. hinc in 1/268435456. hinc in 1/536870912. hinc in 1/1073741824. hinc in 1/2147483648. hinc in 1/4294967296. hinc in 1/8589934592. hinc in 1/17179869184. hinc in 1/34359738368. hinc in 1/68719476736. hinc in 1/137438953472. hinc in 1/274877906944. hinc in 1/549755813888. hinc in 1/1099511627776. hinc in 1/2199023255552. hinc in 1/4398046511104. hinc in 1/8796093022208. hinc in 1/17592186044416. hinc in 1/35184372088832. hinc in 1/70368744177664. hinc in 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Rec. Lithargyri, ℥ss. Sulfuris, ℥ss. Masticis, ℥ss. Take these in fine powder and use it as before, &c.

℞. Aluturum Masticis

**Pulvis Cephalicus Lucii ex Galeno.**

Rec. Iridii, four dragmes. Antholochis rot. Pollinis thuris, ana, two ℥. Corticis radicum panachis, ℥ss. Fiat pulvis.

It healeth those painfull sores called Nostrils.

℞. Aluturum Masticis

Rec. Corticis radicum panachis, ℥ss. Antholochis rot. Pollinis thuris, ana, two ℥.

It healeth those painfull sores called Nostrils.

℞. Aluturum Masticis

Rec. Corticis radicum panachis, ℥ss. Antholochis rot. Pollinis thuris, ana, two ℥.

It healeth those painfull sores called Nostrils.

℞. Aluturum Masticis

Rec. Corticis radicum panachis, ℥ss. Antholochis rot. Pollinis thuris, ana, two ℥.

It healeth those painfull sores called Nostrils.

℞. Aluturum Masticis

Rec. Thuris, j. ounce. Aloes, halfe an ounce. Fiat pulvis.

This powder must be mixed with the white of an egge,

and the haire of a hare, and apply it to the place

whereas the fluxe of blood is, &c.

℞. Aluturum Masticis

Rec. Thuris, j. ounce. Aloes, halfe an ounce. Fiat pulvis.

This powder must be mixed with the white of an egge,

and the haire of a hare, and apply it to the place

whereas the fluxe of blood is, &c.

℞. Aluturum Masticis

Rec. Thuris, j. ounce. Aloes, halfe an ounce. Fiat pulvis.

This powder must be mixed with the white of an egge,

and the haire of a hare, and apply it to the place

whereas the fluxe of blood is, &c.

℞. Aluturum Masticis

Rec. Chalcedones, c. scruples. Chalcantii, l. scruples. Misys

℥ss. Acris vti, xj. scruples & a halfe. Fiat pulvis.





**Rece. Sanguinis draconis, Boli armeni, Terz. sigillat. ana. one ounce, Balanithorun, Acacie, Hypocistidis, Nucum cupressi, ana. one ounce and a halfe, Mumiæ, Mastiches, Turris, ana. two dragmes, Sang. humani combult. one ounce, Platorum Leporis combult. three ounces.** **Fac. ungu.**

It is excellent in letting of the flowe of blood, and both in curing and preventing wounds, and to glue their sides together, if they be first cut out with a knife.

**Pulvis ad sanguinem ascendendum.**  
**Rece. Sanguinis draconis, one ounce and a halfe, Olibani, two ounces, Mastiches, one ounce, Aloes hepaticæ, vi. dragmes, Sarcocollæ, five dragmes, Tridacis, Pulveris stolaris, ana. one ounce.**  
 Make all these in fine powder, and keepe it in a Chamberlaine powder both to stanch the bleeding of wounds, if they be first cut out according to the arte of Chirurgery, and layed upon the wound when mixed the white of an egge, & a little greene balme laid upon that, and so applied to the wound, it maketh the flesh to grow together in short time, and keepeth the wound from putrefaction and paine, and looke like a scab, &c.

**Pulvis Emfracti pro eodem.**  
**Rece. Olibani, two ounces, Sanguinis draconis, Boli armoniaci, ana. one ounce and a halfe, Mastiches, Pulveris malonis, ana. one ounce, Aloes coccolinis, five dragmes.**

Make all these in fine powder according to art, and keepe them in a glasse, and mixe it with the white of an egge and greene balme when you will use it, as is aforesaid.

**Rece. Pulveris stolaris, Farinæ Hordeaceæ, ana. five ounces, Gummi dragaganti, Gummi arabici, Olibani, ana. two ounces, Mumiæ, Boli armeni, ana. one ounce.**

Take all these in fine powder according to arte. This powder is good for broken bones of the legges, armes, or any other place of the bodie, and when you doe minister it, it shall be mingled with the boyle of an egge well beaten together, and it shall be layed upon a limbeck cloth bound. And when you have reduced and put the bone that is broken into his right place againe (so that it stand even and straight, as it was before) you may apply this medicine upon it, or round about it, as the case doth require, laying the member even upon a board, or upon some thing made for the same purpose. But you must be sure to defend the member with a good defendment that no such accidents come unto it, and see that the member be hereto well intenced, with good and convenient solents, and take heed that you bring not the member too straight as fast, least you lose the course of the limbeck spirites, and in the mean while hurt the member and his life. If his powder may be so to the length date of the tenth date, if there come no such accidents, and then refresh it againe as you did before, and if any accident come to the member, you must refresh it the sooner, and as often it with warme oyle as is aforesaid. This powder is good also for wounds, for it stoppeth bleeding, and maketh the wound quicklie to consolidate if it be layed upon the other two powders aforesaid, or on either of them in manner of a plaster, when they are mingled with the greene balme, as is aforesaid in their places.

**Cataplasma D. Gul. Buttes**

Take a fat peece of Venise or a Capon, and boile it in water and white wine, then straine it from the flesh and set the same liquor over the fire againe, and put therein Malacum, in two, Fehorum Violatum, Solatri, and one.

Boile

Boile them till they be soft and tender, and then take it from the fire, and poyse aboue the liuer, and stampe the hearbes fine in a morter, and put thereto Barlie meale as much as shall suffice to make it like a Cataplasme or Poultie according to art.

*Cataplasma eundem ad dolorem sedendum.*

Rec. Maluarum, Fol. Violarum, ana. m. j. Florum Chamomille, Foliorum rosarum, ana. m. j.

Boile all these in milke till they be soft and tender, then put them in a morter, and stampe them small, & put thereto Vnguenti rosarum, Vnguenti populij, ana. j. 3. and a halfe. Vitella ouorum, numero. ij. Farina hordei, two ounces.

Incorporate all these together, and when you shall occupie it, spread it thicke on a cloth, and warme it against the fire, and if there be any hard indurate matter in the member, then put thereto the Decoction of Marsh mallow roots and Seminis Psylli, ana, halfe an ounce.

*Cataplasma Diaphoreticum D. Cu. Cuninghams Medici.*

Rec. Foliorum Sambuci, Saluie, Ruta, Alther, Chamomilli, ana. m. ij.

Wuse and cut these small, and boile them in in the decoction of Limesede and Fenegreake, and when they haue boiled untill they be tender and soft, adde to them Olei irini, Anethini, Castorij, ana, one ounce and a halfe.

Boile them againe together, and make a Cataplasme according to art.

This Cataplasme is good to resolu & mollifie all hardness of ioynts, and grosse and sticke humours which are impact in the same. Therefore it is profitable in pailions of ioynts, Chiragra, Podagra, and Sciatica, and such like. Also it may right well be vsed in colde tumours infesting the musculous parts of the armes and legges.



## The second booke of

### Aliud Valentini eundem

**Rec.** Radicum & foliorum Ebuli, Althee, ana. m. i. Foliorum Rute, Sabine, Pulegij, Sambuci, ana. m. sc. Chamæmeli, Meliloti, ana. m. ii.

Wise these being cut and brused to one part of spallsey, and three partes of oyle of Camomill, untill they come to the substance of a Cataplasme, &c.

This Cataplasme is of like vertues with the other going before, saving that it is of greater force and strength in the effects before remembered, &c.

### Cataplasma anodinum, nostri inuentionis.

**Rec.** Foliorum Iusquiami, Violarum, ana. i. m. Boile them in water untill they be soft, then stamp them fine, & adde to them Panis puriss. one pound, Lactis, one pound, Olei rosati, three ounces. Vitella, quorum numero, ii. Croci, one scruple.

Make hereof a Cataplasme according to arte. This Cataplasme or Pultas is verie excellent in ceasing of paines in the gout, of cholerike persons, where great inflammation is, & in a sensible & tender bodie. For it doth both all waige paine and remoues swelling in short time, if the bodie be well prepared before.

### Cataplasma Rogenij.

**Rec.** Farine fabarum, one pound. Furfuris subtiliter puluerisati, ii. m. Stercoris caprini, one pound. Chamomill, Meliloti, Absynthij, ana. m. sc.

Stamp your herbes fine, and boile them all together with sufficient white Wine, and le of Barbers. Boilunt untill it come to the forme of a Cataplasme, and applie it so hot as the Patient may suffer it. This Cataplasme is of great resolution in windy matters of the ioyntes, for it both resolue and dispearce the winde and wattrie matter.



them stand in the space of seauen daies closly covered. Then  
let them to still with a soft fire according to art. First, you  
shall haue a cleere water called water of Balme, which you  
may receiue a parte, and when the colour of the water  
chaungeth some thing to yelownesse, than heape that water  
a parte, and put vnder another receiuer to take the next li-  
cour, which will be like to a yeolow water, then you may  
increale your fire by little and little, till you perceiue drops  
of oyle come forth, which oyle will be yeolow also, then you  
may remoue that receiuer, and put vnder another to take  
the balme, which will come after that oyle & water, which  
Balme will be more thicker and redder than the oyle, and  
it will come of it selfe without water. This Balme is ve-  
rie precious, and is called arteificiall Balme. Now the oyle  
that I spoke off before, that came with the yeolow water,  
is called the oyle of Balme, and it will swimme aboue the  
water, so that you maye diuide it from the water at your  
pleasure. And this oyle is most precious in Paralyses and  
Spasmus, comming of cold matter, as I haue many times  
proued. The water of balme is verie precious, an olde Al-  
chymist did distill it againe with raine water, so much of  
one as of the other, & called it the Ladie of all medicines,  
so; it is of great vertue in resisting the plague, poison, and  
many other things, if it be taken with Ale Ware, or wine,  
fasting, the quantitie of sixtene or twentie drops, in one  
sponefull of anie drinke aforesaid, but I haue vled it so; a  
remedie against the plague, after this manner: Take of the  
leaues of Rue, Mowmwood, Scabions, Turpentine, Mart-  
golde, and Dragame, of each two ounces, and put them  
into one quart of the water so distilled, with raine water,  
the space of thre daies, and in that time the water wil take  
all the vertue from the hearbes, so that it shall not haue the  
vertue of those hearbes, but all the vertue it had in it selfe  
before. And thus I vled it to the great profit & sauegard of  
many. If I should write all the meruailous things that I  
haue done with this water, Oyle, and Balme, it were to be  
inuerualled at, and yet most true. As concerning the vles and  
commodities of them, you shall finde in diuers of my booke



as costs both require,

### Lac Virginum.

Rec. Litharge of silver in fine powder, three ounces, of good white vinegar, halfe a pinte, mixe them together, and distill them by a silture, or through a little bagge, or by a peece of cloth, take of the same water, mingle it with water of salt, made with one ounce of salt powdered, and halfe a pound of raine water, or well water, and mingle these waters together, and it will be white like milke, and with this rub the corrupt place. Some addeth a little Cerule with this Litharge which is good for all rednesse of the face.

### Aqua corrodens.

Rec. of Sal alkali, or if ye cannot have that, take Sal Armoniacke and unslaked Lime, ana, one pound, and beate them to fine powder, and put them in an earthen pot which hath holes in the bottome like to a Collander, & presse them stronglie downe, so that the water may not swiftly passe through, and powze vpon them so much water as will cover it a finger height above the powder, and so suffer it to drop or straine through, and put vnder it a receptacle to keepe the water, and when all the water is runne through, runne or take new Lime and new Salt, as is aforesayde, and let the foresayd water runne through the same, and keepe that water for your vse. This water is good in many operations, it will canterise like an hot yron, and it is good in fistules, and to many other things, if ye adde to this of Mercurie sublimate in powder one ounce, it will be the better, and chieflie in Chamelcontia, wher the bones be corrupted.

### Aqua Mercurialis.

Rec. Mercurij sublimati, Salis armoniaci, ana, halfe a pound.

Grinde them vnto fine dust vpon a moller stone both together.

D. h.

ther,

ther with out any other licour, and put this in a strong Glasse, that will abyde the fier. Then take a newe earthen pot, and put ashes into it, the thickness of one finger. Then shut your Glasse in the pot, and fill up the pot with ashes round about the Glasse, so that the Glasse may stand fast within the pot. Then put your pot with the Glasse to lye in it, into a forge, and make underneath it a fier, and close the mouth of the glasse with some linnen cloth, not to haue for breaking of the glasse, and sometime open it to giue vent. And you shall know when it is boyled enough, by putting in of a whistle, or some other instrument of Iron, and if it be boyled enough, it will cleave to the pipe, or instrument lyke to molten pitch. Then take it from the fier, and let it stand untill it be colde, then breake the glasse, & take the substance that you finde in the same glasse, and make it in fine powder once againe vpon a moller stone. Then let it stand a day & a night in an earthen vessell put a broad, very thinne, that it may take the ayre, and become moist, then put it in a bagge and hang it vp, that it may drop into a vessell of glasse, and that water will be very cleare, and is called Aqua Mercurij. This water maketh Copper white, and all other mettalles, and is of a meruailous operation, it will cure a fistule if it be put to the bottome thereof by art, for it taketh away the hard flesh which letteth the fistule to be made whole.

### Aqua ad oris Vlcera.

Rec. Hordei excorticate, M. j. Foliorum Saluie, Violarum, ana. M. j. Rosinarine, M. f. Mellis, iij. sponcfulls. Aluminis, two vnces.

Boyle all these together in one gallon of water till the better halfe be consumed, then straine it, and lette the sicke man continually wash his mouth with it warmed till he be whole, it is good for those that hath a sore mouth which cometh by reason of applying the vnguent used in Chamæleontiali, in which vnguent Argētum viuū is put, and the more the patient spitteth and washeth the better it is.

Alia

## Alia aqua pro eodem.

Rec. Roxifmariz, Salsig, ana. M.iiij. Lupinorum, M.ii.  
Aluminis, foure vnces. Mellus, halfe a pound.

Boyle all these together in foure gallons of water, untill the halfe be consumed: Then let it stande untill it be colde, and straine it, and keepe it in an earthen pot to your vse. This water serueth for the lyke purpose, that the other aforesaid serueth for, and in a great excretion. It healeth Cankers in the monthes of children, and in olde sores also, if it be mixed with Vnguentum Egiptiacum, more or lesse, according to the disease.

It is good also to wash rakerous Sores, if you put thereto a little Egiptiacum, aforesaid, for it preserveth the Ulcer from putrefaction, if other convenient medicines be applied therewithall.

It dyeth by also olde sores being mixed as is aforesaid, if they be not depe in the flesh, many other good properties it hath, which you shall finde by experience thereof.

## Aqua ad mundificandum vulnera, nostræ inuentionis.

Rec. Agremoniz, Hyperici, Centaurij, Absinthij, Scabiose  
Crassulæ imonis, Radicis Symphiti, ana. j. M.

Stamp all these wel, and let them boyle with one gallon of water, and one pottell of white Wyne, and halfe a pound of Sugar, untill halfe of the liquor be consumed. Then straine it, and keepe it to your vse.

This water must be conveyed into the deepe places of wounds or Sores with a syringe made so warme as the patient may suffer it. And if you will haue it of great mundification, adde thereto Mel Rosarum. And if you will haue it of greater excretion, and some thing to sole and put away inflammation, adde vnto it when you will occure it, halfe so much plantain water, or nightshade water, where in a little Alum is boyled.

This



This water is excellent in operation, for it cleanseth frō the deepe partes all corrupt and blisshie humours, and causeth the other medicines that are applied to the soze places to take the better effect in their operation; you maye mingle also with this decoction Vnguemum Egyptiacum, or the powder of Opereuncle precipitate, according to your description. *Historia secundum u. al. med. 2: capitulum 50. folio 20. lib. 20.*

Whithin altaries, that all other good intentions requirē in the use of Chirurgerye, be observed and kept, specially the euacuation of the matter that they growe of, as that maintaineth them, and also to keepe such viēt, as is meet for the curing of that disease.

**Potio ad vulnera conglutinanda, nostra  
inventionis.**

Rec. Polipodij quercini, foure ounces. Criffula maioris, Pirola, Anauce, Pilofille, Veronica, ana, two ounces. Soliste- quij, Agrimonie, ana, one ounce.

Chop all these beeres finall; and put them into a new  
earthen pot, and put thereto one pottell of the best Mal-  
sey that you can get, and one quart of water of Scabious,  
and seeth them in Balneo Marie, by the space of three houres  
together, and in anie wise let the pot be close covered, and  
passed about with some tow & bran, that no breath go forth,  
and if the wound be in the head, put in a little Sage, Beto-  
nie, and Lauender spike, and if it be in the breast, & through  
the lungs, put in a little Lycioze, Delyoe, and Cinola cam-  
panie roote, if it be about the raine, put in a Warlike roote,  
and a Fenell roote, when all these things are boiled toge-  
ther, let it stand by the space of one night after, then open the  
pot and straine forth the liquor: and put thereto of fine  
Sugar four pound, & boile it a little againe. This drinke  
is most excellent for the curing of wounds that be in the bo-  
die, or through the bodie, for it healeth them in short time,  
and consumeth awaye the blood that is within the bodie  
without anie griefe or paine, in a manner they neede no  
other remedie. For if they wash the wound with this same  
drinke











hath found great profit and gotten great worship thereby, I  
invented my selfe a Sirupe. which I made with this same  
decoction, stronglie boiled with Sugar, so much in weight  
of one as of the other, boiled till it come to a Sirupe, with the  
which Sirup I bid manie great cures, and chieflie when the  
patient was verie weake, as you shall finde moze hereafter  
in my booke. And thus we end this Chapter, for the which  
the name of God be praised.

Potio ad vulnera recentia Brunswi-  
centis.

**T**ake Iuie leaues, or Edera arborea, growing on an oken  
tree, foure ounces, Winter greene, small and greate, or  
Virola, in Latine, Sanicle or Diapensia, Syndan, Herba  
fortis, or Veronica, ana, ii. ounces, Herba solequi, one ounce.  
Chop all these together verie small, and put them in a pen-  
ter pot, and put thereto foure pound and a halfe of the best  
wine, and of water one pound and a halfe. And ye shall seeth  
them in Balneo Mariæ thre houres long, without taking off  
the Lyd of the pot, then on the morrow after put thereto  
eight ounces of Sugar. If the wound be in the head, then  
put thereto Betonie, two ounces, Sage, one ounce, Lauen-  
der, halfe an ounce. And if the wound be in the breast, then  
put thereto, Licorice, two ounces, Polipody, one ounce, I-  
sop, halfe an ounce, and if the patient be feeble and loze, then  
put thereto Buglosse flowers, Borage flowers, ana, i. ounce  
Roses, halfe an ounce, then if the patient haue great heate,  
put thereto violets, two ounces, flowers of Penusar, halfe  
an ounce. If the wound be on the left side, do thereto liver-  
wort, one ounce, Patrisline, halfe an ounce. Also if he be not  
soluble, then it is needfull to put thereto of Sene leaues,  
Cassia fistula, ana, two ounces, and if he be deepe wounded,  
then put thereto Celidonie rootes, foure ounces, and giue it  
him to drinke at morning, at none, and at euening, and at  
euery time, foure ounces.



## The second booke of

**Alia potio eiusdem, pro eodem affectu.**

**R.** Matrifillæ, Pilosillæ, Nausturtij, Brunellæ, Plantaginis, ana, m. i. Rutæ, Matricariæ, Chelidoniæ, ana, m. i. Herbe sarasennicæ, m. i. se. Diarentiæ, Herbe fūnici, ana, m. i. Saluie, m. se. Serpentinæ, Dictami, ana, two ounces. Castorij, Mumiz, Myrrhæ, Absinthij, ana, halfe an ounce.

Put all these together in a pot with good white wine, and couer the pot with a lid, and close the lid with dough, and in the lid make a small hole, and stoppe it with a tap of wood, and let it seeth till the third parte be consumed, and drawe the tap sometime out, that ye may smell when it is enough. Of this giue the patient to drinke at morning and euening a spoonfull, and though the patient be mællie in health, yet shall he not drinke the lesse, & he shall in his day. He drinke, mebble three or foure drops of the same.

**Aqua imperialis contra pestem.**

**Rec.** Radicis Brionix, Gladiolæ, Angelicæ, Turmentillæ, Lapatij, Draguntij maioris & minoris, ana, two ounces, Corticis fraxini, Guaiaci, ana, one ounce.

Gather your rootes in March, and picke them cleane, then stampe them with the barks esoresatæ, and put them in strong Palmsey, the quantitie of foure pound, or a pottell in a close pot. So let them stand infused vntill the later end of May, then gather these beaues following.

Foliorum scabiosæ, Betonicæ, Minthæ, Verbene, Turmentillæ, Calendule, Pimpinille, Rutæ, ana, m. ii. Foliorum Angelicæ, Dragantix, Absinthij, Saluie, ana, m. iiii. Hyperici, Pionix, Valerianæ, Endiuix, ana, m. i.

Bruse all your beaues, and put them infused in one quart of strong vinegar, one quart of Rose water, and one quart

to the Antidotarie.

quart of good white wine, three daies. Then still them in a common still and keepe this water to your vse, for it is most precious against the pestilence being mixed with good Metridatum or Tracle, and giue five poundfulls euerie day both to the sicke and whole.

Aqua corrodens alia.

R. Salis gemmæ, Salis alcali, ana, three ounces. Aluminis scissilis, vi. ounces.

Make these in fine powder, and put them in a Gallon of sweet water, and boile them on the fire, and reserve this to thy vse. This is herie good against filthie and rotten vlcers, having inflammation ioyned with them, as experience both hath and can testifie.

Aqua nobilis in oculorum vitijs.

Rec. Feniculi Rute, Betonice, Chelidoniz, Verbena, Euphrasiz, ana. ii. m. Rosarum rubearum, xii. M. Ligni sancti, lib. fl.

Use these, and put them in a new earthen pot with a quart of white wine. Let these be thus infused two daies, after put to them Aluminis, iii. ounces, Salis gemmæ, 3. ii. Mastiches, Vitrioli, ana, 3. i. Olbani, Myrrhe, ana, one ounce, fl. Make these in powder, and put them with the other parcels into a still of glasse, and put his head on it, and lute them well together, and set a raptorie also to it, well closed to the spout of the head, so let them stand one daie, after distill them in Balneo Marie, according as arte requirereth.

This water remoueth the white spots in the eyes, and restraineth the fluxe of humours which haue recourse to the eyes, and is right excellent in other griefes of the same, as hath bene certaintie tried not long since, in a childe of the vnder shipfull Maister Gunstones of London, which having sore eyes, and diuerse sandie medicines to them applyed, did nothing preuaile, but brought the eyes into worse

P. ii.

case:

## The second booke of

case: insomuch that some learned in Physicke counsailed the parents to boare the skin of the necke through with an hot yron, that the humours ascending might breath out, or else to purge the head with pills, & at the least to make diuersi- on of humours. But in fine, nothing preuailed, & so the child was left to the worke of nature. Then M<sup>r</sup>. Gunstone seeing her childe void of helpe & comfort, was yet not in dispaire, but hoped that God would send some remedie. So he found an olde booke, in which this water aboue said was contain- ed, & for the perfecter distilling thereof he did require my helpe, which willingly I granted, and distilled the water, of which three or foure times he did drop a little into the chilles eyes, by which ble and continuance the inflammati- on was put a waie, the sur of humours staid, the white spots and webs consumed, and the chilles eyes restored (than- ked be God) to their perfect health and sight. Which water for the excellencie and noble vertues, I thought good to set out for the comfort of such as shall haue the like infirmittie. I haue with this water done many good cures since y<sup>e</sup> time, and haue of my selfe added vnto it more than was in Sir William Firminghams booke, who was well learned in Chi- rurgerie, and author of this water, the roses, and Lignum sanctum. He flourished in the yere of grace, 1475.

*Alla aqua preciosa in iisdem oculorum morbis.*

Rec. Foeniculi, Verbene, Salsule, Agrimoniae, Betonicae, Ruta, Chelidoniae, Eufragiae, Calaminthae, Pimpinellae, Scabiosae, Chamedryos. Bruise your hearbs, & put to them one quart of white wine, and a pint of water of red roses, also adde A- luminis foure ounces. Tutie, two ounces. Caphure, iij. drag- mes. Make these in powder, and distill them in a common still, and when you haue once distilled them, put the water vpon the feces, and distill it againe, and then reserve it to thy vse. This water is right precious in tomatike bootie & inflammations of the eyes, and other like effects.

Aqua



Rec. Aqua vitæ quinquies distillatæ iiii.li . Salis vsti, Sulphuris viui, ana, i. pound. Tartari albi, iii. ounces. Nucum In- glandis, Auellana, ana, foure ounces. Nitri, two ounces. Mir- rha, Aloes, ana, one ounce. Gariophillorum, Nucis muscate, ana, one ounce, fl. Corticum limonum, arangie, ana, vi. ounces. Betonie, Verbenæ, Agrimonie, Hyperici, Fœniculi, Valeria- næ, Scabiose, ana, i. m. Rutæ, Absinthij, Menthe, ana, m. i. Ra- dicum angelicæ, Zedoarie, Tormentillæ, Acori, ana, i. ounce & a halfe. Florum genestæ, foure ounces. Rorismarini, Camo- millæ, ana, two ounces. Theriaces optimæ, 3. iii. Sem. . Anisi, Peonie, Petroselini, ana, 3. i. f. Use these yare to be brysed, and put all together, and let them stand fure daies, after di- still them according to art, and if that you doe againe distill them on the feces once or twice, you shal make the water of much moze effect and vertue.

It is excellent against venime, poison, and pestilence, it both keepe the humours and bodie from corruption and putrefaction, and that experience can right well testifie. The proportion or quantitie, is to giue one spoonful with a cake or two of Manus Christi, or in cholerike and sanguine com- plements, and hot regions, times of the yeare, with Stripes of Buglosse or Violets, &c.

Thus endeth the Antidota-

rie, compiled and published by Thomas Gale, Maister in Chirurgie.

FINIS.

P.iii.



**A profitable Table, containing all the differences**

**Place this  
Table in  
folio. r2,**

**Simple, ther  
are ii. kindes.**

**Hot ther  
are ii. in  
number.**

**Phlegmone**

**Erisipelas.**

**Cold ii. in  
number.**

**Oedema.**

**Scirrhus.**

**1. According to Nature,**

**Humoralis  
comming of  
humours, of  
which there**

**all iiij. humors  
& the tumour  
Equallie, taketh name  
of them all.**

**2. Above  
Nature.**

**are ii. kindes**

**Compounds  
springing of  
many hu-  
mors mixed  
either**

**ii. together as**

**3. Against  
Nature of  
which there  
are iii. kinds,  
that is to say**

**2. Flatuosus  
which com-  
meth of the  
windie spi-  
rits, & are ii.**

**Timpanites.  
Priapismus.**

**Thequallie, as when  
there is mixed with**

**3. Vains called because  
is sometime of humors,  
sometime of spirits, and  
sometime of both : such  
are**

**Vitilgo, Exanthema, Pa-  
pules, Metagra, Epiplo-  
cele, Enteroccele, Enteroc-  
piplocele, Bubonoccele,  
Exomphalos, Arthritis,  
Podagra, Chiragra, &c.**

**FINIS**

**7**

# of Tumours against Nature.

Vnto Phlegmone: Phygethion, Bubo, Phyma, Do-  
thienes, Anthrax, Gargareon, Paristimia, Aneuris-  
ma, Gangrena, Sphacelus.  
Vnto Erisipelas: Herpes, Esthiomenus, & Miliaris,  
Phlyctæna, Epinyctides, Hydroa, &c.  
Vnto Oedema: Atheroma, Steatoma, Meliceris,  
Hydrocele, Ascites, Leucophlegmatia, Chæras,  
Broncocele, Hydrocephalon, &c.  
Vnto Scirrhus: Cancer, Elephantiasis, Satyriasmus,  
Pfora, Lepra, Enchimonia, Melasma, Varices, Sar-  
cocele, Polipus, Verruce, Acrochordones, Myrme-  
cia, &c.

Bloud & { Coller. } and is { Phlegmone & Erysipelas.  
{ Fleme. } cal- { Phlegmone & Oedema.  
{ Melanc. } led { Phlegmone & Scirrhus.

Coller & { Bloud. } and { Erisipelas & Phlegmone.  
{ Fleame. } is cal- { Erisipelas & Oedema.  
{ Melach. } led { Erisipelas and Scirrhus.

Fleme & { Bloud. } and { Oedema and Phlegmone.  
{ Coller. } is cal- { Oedema and Erisipelas.  
{ Melach. } led { Oedema and Scirrhus.

Melan- { Bloud. } and { Scirrhus and Phlegmone.  
cholic & { Coller. } is cal- { Scirrhus and Erisipelas.  
{ Fleame. } led { Scirrhus and Oedema.

Bloud. { Coller. } and { Phlegmone Erisipelatodes  
{ Fleme. } is cal- { Phlegmone Oedematodes  
{ Melach. } led { Phlegmone Scirrhotodes.

Coller. { Bloud. } and { Erisipelas Phlegmonofus  
{ Fleame. } is cal- { Erisipelas Oedematofus.  
{ Melach. } led { Erisipelas Scirrhotofus.

Fleme. { Bloud. } and { Oedema Phlegmonides.  
{ Coller. } is cal- { Oedema Erisipelatodes.  
{ Melanc. } led { Oedema Scirrhotides.

Melan- { Bloud. } and { Scirrhus Phlegmonofus.  
cholic. { Coller. } is cal- { Scirrhus Erisipelatofus.  
{ Fleame. } led { Scirrhus Oedematofus.

*These Tumours take their names first of the  
humour which predominates in the mass,  
and next of that which is with it mixed.*



# AN EXCELLENT TABLE, DECLARING

the differences of wounds.

Place this Table in folio. 22.

Place this Table in folio. 22.		1. Soft part, as in	{ Flesh. Fatnesse }	
Similar part, of which there are iij. differences, for it is ei- ther in	1. Of the nature of the part in which the wound is made : as in	2. Hard part as in	{ Bones Ioynts }	
		3. Neither soft nor hard, as in	{ Veines. Arteries, Nerves Tendons Ligaments. }	
		1. Principall parts as in the	{ Hart Liuer Brayne. }	
Instrumental part : so is it either in the	2. of the effe of solution of conti- nuitie.	2. Seruing the principal parts, as in	{ Aspera ar- teria, Throte. Bladder. }	
		3. not seruing the principal parts	{ Nose. Eye. Hand. Feste. &c. }	
		Simple wound.		
The princi- pal difference of woundes are taken of iij. thinges : that is to say	3. Of the difference of solution of cō- tinuitie : as of	Compound.		
			Quantitie & the wound is called	{ a great or little a long or short, a braade or narrow, a deepe, or shallow }
				{ Wound,
		{ equal or ine- quall, a crooked or oblique. a retorse.	{ Wound, &c.	



# Stalks of herbs

Cucumbers.

五

are iii. kinds, 3. broken in many (small) pieces named Alshidra

ture of the / or  
cob and

as a frac-  
Granorena

care with in this nation

...Friedrich Schlegel...

interior

...

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THE UNIVERSITY OF CHICAGO

Acidität und Toleranz

Learning.

Miss Kitty Johnson

1947

10

10

100

16

...

1908

3



place this  
table in  
folia. 25.

# A Table of luxations and dislocations.

Luxation.

Imperfect,  
and that is  
Simple, and  
it is either

perversio, of for either Backwards.  
which there are three sub-  
are iii, kinds, luxatio is Sidelong.  
{ Forwards, }  
{ & is } Lordosis  
{ } Ciphosis  
{ led } Scoliosis.

Every luxa-  
tion or dis-  
location is  
either

Perfect.

Imperfect.

Compound  
be either

Perfect.

Of these compound Luxation with a frac-  
ture,

Luxations both  
perfect, and also im-  
perfect, the chiefe dif-  
ferences are these fol-  
lowing, as  
Luxation with an in-  
flammation,  
Luxatio with a wound  
Luxation with dolor.  
Luxation with hard-  
ness.

3

1871-72

percutaneous

Compound

257

CHINA

Robert M. Anderson

100

EXPLANATION OF THE

ERIC

Of great importance Turkish with a few

100

155

10  
 9  
 8  
 7  
 6  
 5  
 4  
 3  
 2  
 1

1678

Siempre, siempre

and class is  
Tubercle

are in kind? luxuria & Sidiou

...there is no...

of Professor Dickson

Calabroli 5. 20. 1710

Forbes

Function

A Table of fixations and impressions.

10/10 x.  
10/10 x.  
10/10 x.



MIEVLX.VAVLT.MOVRIR.EN.VERTV.  
QVE.VIVRE.EN.HONCTE.

AT LONDON  
Printed by Thomas East,  
DWELLING BETWEENE PAVLS  
Wharfe, and Baynards Castle.  
1586.







AT LONDON  
Printed by Thomas Earl  
DWELLING BETWEEN PAULS  
Wharf and Baynard's Castle  
1788.



